2025 SUSREG ANNUAL REPORT

AN ASSESSMENT OF SUSTAINABLE FINANCIAL REGULATIONS AND CENTRAL BANK ACTIVITIES

"We are rapidly approaching multiple Earth system tipping points that could transform our world, with devastating consequences for people and nature. This demands immediate, unprecedented action from leaders at COP30 and policymakers worldwide."

UNIVERSITY OF EXETER[1]

"The world faces an unprecedented investment imperative as the window for meaningful action on climate change narrows rapidly. To meet the Paris Agreement goals, have a chance of mitigating the worst impacts of climate change, build resilience and protect nature and biodiversity, transformative investments are essential, particularly in emerging markets and developing countries."

NICHOLAS STERN, GRANTHAM RESEARCH INSTITUTE ON CLIMATE CHANGE AND THE ENVIRONMENT[2]

"While the fundamental principle -that climate and nature are relevant for both monetary policy and banking supervision and, therefore, must be taken into account in the exercise of our tasks- is independent of the actions of climate and nature policymakers, the intensity and configuration of the risks that will ultimately materialize is not. The choices that climate and nature policymakers make will determine what combination of transition and physical risks ***materialises in the years to come****."*

FRANK ELDERSON, MEMBER OF THE EXECUTIVE BOARD OF THE EUROPEAN CENTRAL BANK[3]

"As Ministries of Finance, we have the opportunity to value nature's contribution to economic growth and social welfare. We must incorporate environmental and biodiversity considerations into fiscal policy and advance the transition to sustainable economies with clean energy sources to help heal the ecological footprint we have created."

MINISTER OF FINANCE OF COLOMBIA[4]

[1] University of Exeter. (2025). 'New reality' as world reaches first climate tipping point.
[2] Grantham Research Institute on Climate Change and the Environment. (2024). Raising Ambition and Accelerating Delivery of Climate Finance.
[3] European Central Bank. (2025). From concept to delivery: accounting for climate and nature in maintaining price stability and keeping banks safe and sound.
[4] Inter-American Development Bank. (2024). Latin American and Caribbean Ministers of Finance to Work on Biodiversity.

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Authors: Siti Kholifatul Rizkiah, Maud Abdelli

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More info at: panda.org/gfr
Contact: gfr@wwf.ch

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WWF is one of the world's most respected and experienced conservation organizations, with over 5 million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature. WWF has worked with the finance sector for more than a decade via innovative collaborations that seek to integrate ESG risks and opportunities into mainstream finance, to redirect financial flows in support of the global sustainable development agenda. Through its Greening Financial Regulation Initiative (GFRI), WWF engages specifically with central banks, financial supervisors as well as insurance regulators on the need to fully integrate climate and environmental risks into mandates and operations. The GFRI tracks regularly how central banks and supervisors are making progress via its SUSREG tool. It also undertakes research, capitalizing on in-house expertise and external partners, and offers targeted assistance, trainings and workshops to individual financial supervisors, central banks and policy makers using scientifically based data, tools and methodologies.

The SUSREG methodology has been endorsed by :

SUREAL | University of Zurich
SUSTAINABLE AND RESILIENT ECONOMY AI LAB

UCL IIPP Institute for Innovation and Public Purpose

Over the past decade, we've seen tangible progress: mainstreaming climate scenario modelling exercises, promoting better language and definitions to characterize climate risks, creating standardized financed emissions accounting frameworks, adopting climate-related disclosure regulations in some jurisdictions, and advancing high-level transition planning principles. These tools have helped financial actors and regulators better assess climate risk; today, many institutions report their climate risk exposure –and how they plan to mitigate it–to shareholders and supervisory authorities. But despite better information, behavior has not changed: since 2015, greenhouse gas emissions have increased year over year, major new investments in fossil fuel development continue to flow in the billions of dollars, and investment in renewable energies remains insufficient."

STATEMENT TO CENTRAL BANKS AND PRUDENTIAL SUPERVISORS ON THE 10-YEAR ANNIVERSARY OF THE TRAGEDY OF THE HORIZON SPEECH: A CALL FOR GLOBAL FINANCIAL REFORM

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EXECUTIVE SUMMARY

In 2025, the SUSREG assessment[1] highlights both meaningful progress and persistent gaps as financial authorities respond to the growing risks of climate change, nature loss, and social challenges. This year's report expands its scope to include capital markets and introduces a new thematic focus on deforestation, freshwater, and ocean health, reflecting the growing recognition of nature-related risks in the financial system.

Supervisory approaches are diverging globally. While some jurisdictions, notably in Europe and parts of Asia Pacific, are strengthening climate- and nature-related regulations, some other jurisdictions are loosening standards, resulting in greater fragmentation. Central banks are making uneven progress, while some have begun to integrate climate and biodiversity risks into their monetary policy tools and disclosures, many still have not embedded sustainability considerations into their core operations. These gaps are not just technical. They often stem from constrained legal mandates, insufficient data infrastructure, and a reluctance to adjust core monetary policy instruments in ways that may entail visible economic and distributional costs.

Insurance supervision is gradually raising expectations for climate risk integration, though nature and social risks remain significantly under-addressed. In capital markets, momentum is building around disclosure, fund-naming rules, and anti-greenwashing measures, yet taxonomy alignment and transition-planning requirements are still at an early stage.

Despite this progress, nature and social risks are often acknowledged only superficially, and enforcement remains limited. The report highlights the need for deeper integration of nature-related risks, stronger macroprudential tools, improved disclosure, and more robust, binding transition plans. With the 2030 global goals approaching rapidly, decisive and coordinated regulatory action is urgently needed to ensure the financial sector accelerates the shift toward a net-zero, nature-positive, and socially equitable future.

[1] Please note that the 2025 SUSREG assessment only includes documents published up until the 31st July 2025; any documents issued after the cut-off date were not considered in the assessment.

KEY FINDINGS OF THE 2025 SUSREG ASSESSMENT

- Nature risk remains largely high-level. Many supervisors now reference biodiversity, water, and ecosystem impacts and dependencies in their guidance, but few translate these into phased, detailed expectations on governance, risk identification, metrics, data, and location-based assessments, or provide clear interim approaches (such as proxies or sectoral heatmaps). As a result, integration into core risk processes remains limited, uneven, and largely exploratory.
- With micro-prudential supervision maturing, financial regulators and supervisors should begin deploying macro-prudential measures to better manage system-wide climate and nature risks. Instruments such as the Systemic Risk Buffer (SyRB) and exposure limits remain rarely activated, despite being central to addressing concentration and build-up of risks across the financial system.
- While supervisory expectations are increasing, enforcement mechanisms remain weak, with limited evidence that supervisors systematically follow up on non-compliance. In many jurisdictions there is little transparency around the sanctions or remedial actions applied, reducing their signaling effect and weakening incentives for regulated entities to meaningfully improve their practices.
- The social pillar continues to receive comparatively little attention. Although closely linked to climate and nature, social risks are still rarely integrated into supervisory frameworks. A practical starting point is to focus on the most material social risks, such as just transition impacts that drive credit, operational, and political risks.
- Asset-manager disclosure rules often apply only to products labeled as "sustainable" creating a two-tier market in which systemic climate and nature risks across mainstream portfolios remain undisclosed and unmanaged. This "greenwashing by omission" loophole leaves the vast majority of capital effectively opaque.
- Central banks are making initial steps, but the integration of climate and nature risks into core monetary policy operations remains very limited. This inaction is often justified through a misinterpreted notion of "market neutrality." Failing to reflect climate and nature risks in decision-making is not a neutral position. It effectively subsidizes environmentally damaging and high-risk activities. A genuinely neutral stance must be risk-based, aligning monetary policy implementation with the true risk profile of underlying assets.
- Green taxonomies continues to expand, yet their impact on capital allocation remains constrained without mandatory, decision-useful disclosures at both product and institution level. In particular, requirements to report metrics such as a Green Asset Ratio are often absent, limiting market pressure to reallocate capital at scale.

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TOP PRIORITY ACTIONS

01. Step Up Nature-Risk Supervision and Central Banking Operation with a "Nature-as-System" Mindset

Financial regulators, supervisors, and central banks should move beyond high-level guidance on nature toward setting clearer and more detailed expectations that define risk drivers, metrics, data requirements, and due diligence standards, and should develop and run nature-related scenario analyses and stress tests themselves. The results should guide both supervisory expectations for banks and insurers as well as central bank operations (including monetary policy implementation and reserve management), so that financial institutions manage nature-related risks with the same rigor they apply to climate risk and central banks avoid amplifying those risks through their own balance sheets and tools.

02. Activate Macroprudential Tools and Strengthen Systemic Surveillance

Financial regulators and supervisors should begin deploying macroprudential tools to address climate and nature risks. Tools such as the Systemic Risk Buffer (SyRB), borrower-based measures, exposure and concentration limits, and system-wide stress tests offer concrete ways to manage risk build-up across the financial system. These instruments should be applied using a precautionary and "ETP" (early, targeted, and proportionate) approach, recognizing both the uncertainty and the potential for non-linear climate and nature shocks. They should also be underpinned by strengthened international coordination (for example through the Bank for International Settlements (BIS), the Financial Stability Board (FSB), and other relevant standard-setters) to ensure consistency for authorities that choose to act.

03. Start Calibrating Pillar 1 Capital for Environmentally Harmful Exposures

Financial regulators and supervisors should begin calibrating Pillar 1 capital requirements for environmentally harmful exposures by proposing and, where the legal framework allows, implementing changes to both the standardized and internal ratings-based (IRB) approaches. This could include introducing sector- and location- specific risk-weight multipliers under the standardized framework, as well as applying targeted minimum values or limits on key IRB parameters (such as Probability of Default (PD) and Loss Given Default (LGD)) for activities assessed as having high climate or nature-related risk. Over time, these adjustments should be grounded in emerging evidence from scenario analysis, loss data, and forward-looking risk assessments, and applied in a transparent and predictable way so that institutions can adapt their business models while internalizing the full risk and cost of environmentally harmful activities.

04. Mobilize Green and Transition Finance as a Strategic Opportunity

Financial regulators, supervisors, and governments should frame sustainable finance not only as a risk-management imperative but also as a core growth and competitiveness agenda for the financial sector. Clear, usable taxonomies and transition-finance frameworks can help banks, insurers, and investors expand the pipeline of investible green and transition projects, develop new products (such as sustainability-linked loans and bonds), and tap into growing global demand for credible sustainable assets.

05. Establish a Stable Disclosure and Transition-Planning Regime for Financial Institutions and Corporates

Financial regulators should mandate corporate and financial-institution sustainability disclosures aligned with recognized standards such as the Task Force on Climate-related Financial Disclosures (TCFD), the Taskforce on Nature-related Financial Disclosures (TNFD), and the International Sustainability Standards Board's (ISSB) IFRS Sustainability Disclosure Standards S1 and S2 (General Requirements for Disclosure of Sustainability-related Financial Information and Climate-related Disclosures), and complement these with a double-materiality perspective and clear expectations for credible, time-bound transition plans for large corporates and financial institutions. Once adopted, these requirements and transition-planning obligations should not be rolled back, as any reversal would undermine legal certainty, reduce trust, and penalize firms that have invested in robust reporting systems and internal controls.

06. National-level and International inter-agency coordination

Governments should create statutory green-finance committees bringing together the finance ministry, central bank, regulators, and environmental agencies to coordinate the national transition pathway. Meetings, agendas, and progress reports should ideally be made public and supported by a stakeholder advisory panel comprising representatives from industry, academia, and civil society. A single Green Macroeconomic Policy Roadmap should set common objectives linked to mitigation and adaptation targets and map them to key regulatory and legislative agendas. In parallel, regulators could participate in cross-jurisdictional peer-learning platforms and structured technical-assistance programs, through which more advanced authorities can share models, datasets, and scenario libraries, supported by pooled international funding to help resource-constrained supervisors build data, reporting, and analytical capacity.

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CONTENTS

INTRODUCTION

STABILITY UNDER PRESSURE: CENTRAL BANKS AND FINANCIAL REGULATORS IN A SLOWING SUSTAINABILITY AGENDA

This year marks a decade since the "Tragedy of the Horizon" speech warned that climate change would impose financial risks beyond the time horizon of most decision-makers, and ten years since the Paris Agreement signaled that governments could come together around a common decarbonization goal. Yet a decade on, that horizon has arrived and the global regulatory response appears to be retreating just as those long-foreseen risks are materializing.

In the United States (US), federal authorities withdrew from the Paris Agreement. The Office of the Comptroller of the Currency (OCC), the Federal Reserve, and the Federal Deposit Insurance Corporation (FDIC) jointly announced the withdrawal of the inter-agency climate-risk principles for large banks. The Securities and Exchange Commissions (SEC) voted to stop defending its climate-disclosure rule, and the Financial Stability Oversight Council (FSOC) disbanded its climate-risk advisory bodies. These steps collectively weaken market transparency and prudential supervision across the entire US market.

In the European Union (EU), the Commission's 2025 "Omnibus" proposals point in a different but related direction. The package would materially narrow the scope of the Corporate Sustainability Reporting Directive (CSRD), remove sector-specific European Sustainability Reporting Standards (ESRS), retain only limited assurance, and restrict mandatory EU Taxonomy reporting largely to the biggest firms, alongside a two-year pause. Even allowing for proportionality, the net effect would be a significant step down in comparability across companies and sectors, with fewer decision-useful data points for supervisors, lenders, and investors.[1]

Together, these developments raise pressing concerns about a potential "race to the bottom" between the EU and the US, where weakening standards in major jurisdictions could undermine global efforts to improve corporate sustainability disclosure. These divergent regulatory approaches risk creating fragmentation and inconsistent expectations for companies operating internationally, potentially diluting the impact of sustainability reporting and complicating efforts to maintain a level playing field. This divergence not only weakens global standards but also creates opportunities for regulatory arbitrage, allowing capital to flow to jurisdictions with the weakest rules and, in doing so, increasing systemic risk.

[1] European Commission. (2025). Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directives 2006/43/EC, 2013/34/EU, (EU) 2022/2464 and (EU) 2024/1760 as regards certain corporate sustainability reporting and due diligence requirements.

Meanwhile, global nature goals show movement but remain highly uneven. By late May 2025, only approximately 54 Parties had provided revised National Biodiversity Strategies and Action Plans in accordance with the Kunming Montreal Global Biodiversity Framework. WWF's National Biodiversity Strategy and Action Plans (NBSAPs) Tracker further shows that even among submitted plans, ambition and alignment with the Global Biodiversity framework vary widely.[2] In the meantime, the financial outcomes from COP16 in 2024 feel short of expectations. Contributions to the Global Biodiversity Framework Fund were limited and did not meet interim expectations, increasing the disparity between ambition and execution. This presents a tangible challenge for financial authorities. While the policy message regarding nature is conceptually clear, the necessary data, targets, and funding pathways to convert it into viable projects and quantifiable risk management remain incomplete and inconsistent across jurisdictions.

COP30's climate outcomes reinforce this broader pattern: although countries agreed to triple adaptation finance and adopted new global indicators to track adaptation progress, the updated national climate pledges remain far off-track, with collective emissions cuts delivering less than 15% of what is needed by 2035. Without a binding fossil-fuel phase-out plan or strengthened long-term strategies, implementation gaps persist, echoing the persistent gap between stated ambition and actual implementation in global nature commitments.

Against this backdrop, the Basel Committee on Banking Supervision (BCBS) updated its voluntary reporting framework in June 2025, encouraging banks to incorporate climate risks more systematically into their disclosures. The changes clarify expectations for both qualitative and quantitative information. Qualitative disclosures cover governance, strategy, and risk-management processes, as well as how banks identify and manage transition, physical, and concentration risks. Quantitative disclosures include sector-level exposures, financed emissions, and exposures that are subject to material physical climate risks. This creates a pathway toward potential future disclosure mandates if jurisdictions choose to adopt it from voluntary guidance to mandatory requirements.[3]

While disclosure and regulatory initiatives are being rolled back in some jurisdictions, central banks and financial regulators still have a mandate to continue maintaining prudential integrity. They should continue to integrate climate, nature, and social risks into their regular supervisory activities, institution-level risk assessments, and system-wide surveillance. While prudential measures are critical, relying on them alone can slow progress. Disclosures should be treated as enablers rather than endpoints, and real change hinges on enforcement and supervisory follow-through. At the same time, a disciplined prudential approach becomes even more essential when other parts of the regulatory architecture lose momentum.

The risk is accumulating and materializing in front of us. Evidence continues to show that environmental and social threats to price and financial stability (through physical damage, transition shocks, legal and liability channels, and broader macroeconomic spillovers) are growing faster than the system is adapting. A precautionary approach is therefore not only advisable but essential.

[[2] World Wide Fund for Nature. (2025). WWF's NBSAP Tracker.
[3] Basel Committee on Banking Supervision. (2025). A framework for the voluntary disclosure of climate-related financial risks.

FINANCIAL SYSTEM ARCHITECTURE

FINANCIAL REGULATION

- Embed climate, nature, and social risk expectations into binding regulations (across Pillar 1, Pillar 2, and Pillar 3) and update these through evidence-based reviews.
- Set clear, enforceable sustainability-related disclosure, labelling, and taxonomy rules (where authorized) to deter greenwashing and ensure comparability across firms, products, and markets.
- Calibrate prudential requirements in a risk-based and proportionate manner (including capital and liquidity, large-exposure and concentration limits, borrower-based measures, etc.) anchored in underlying risk rather than stand-alone "green incentives".

FINANCIAL SUPERVISION

- Enforce climate-, nature-, and social risk supervisory expectations, with remediation and sanctions for persistent deficiencies.
- Monitor institutions' exposures to climate, environment, and social (C/E/S) risks through risk-based surveillance, supervisory data requests, and on-site examinations.
- Provide structured feedback to the regulator on compliance gaps and emerging risks to inform rulemaking, guidance updates, and supervisory priorities.
- Supply central banks with timely, decision-useful data to support macroprudential surveillance.

CENTRAL BANKING

- Integrate climate, nature, and social risks into macro-financial surveillance, scenario design, and system-wide stress testing, and use the diagnostics to inform policy and risk-control settings.
- Keep interest-rate decisions anchored in the price-stability mandate while incorporating sustainability-relevant risks through collateral frameworks, asset-purchase/portfolio policies (where permitted), and foreign exchange reserve management subject to safety, liquidity, and return.
- Design targeted refinancing operations to support climate-mitigation and adaptation efforts, as well as nature-conservation projects, where authorized, with clear eligibility and safeguards.

THE INTERCONNECTED ROLES OF FINANCIAL REGULATORS, SUPERVISORS, AND CENTRAL BANKS IN DRIVING SUSTAINABLE AND EQUITABLE TRANSITIONS

Financial regulators, supervisors, and central banks play distinct but connected roles in greening the financial system, hence they sit at the center of the SUSREG assessment.

Financial regulators set the rules of the game: they determine what must be disclosed, which risks institutions must manage, and how prudential tools apply. For example, by defining the reporting standards, and setting risk-control and capital requirements.

Financial supervisors enforce the rules: they test implementation through supervision reviews and use remedies when firms fall short (from remediation plans, fines, dialogue, pillar 2 add-ons, etc).

Central banks integrate climate and nature into their core functions: they reflect these risks in collateral frameworks and asset purchases, develop and apply scenarios in financial-stability surveillance, and consider transmission effects in monetary policy and liquidity operations.

Collective outcomes improve when these authorities act together in harmony. High performers formalize coordination with shared data dictionaries, common scenarios, joint risk dashboards, and published playbooks that spell out who acts, on what evidence, and by when, avoiding gaps and overlaps.

Governments complete the picture by setting the legal and policy ground rules. Through legislation, fiscal measures, carbon pricing and subsidies, public investment, and national strategies, they create the enabling environment for the financial framework to work and for capital to flow toward climate and nature goals.

THE SCALE AND ALIGNMENT OF THE FINANCIAL SYSTEM SHAPE CAPITAL COSTS AND DETERMINE THE PACE OF THE CLIMATE- AND NATURE-POSITIVE TRANSITION

USD
486.4
TRILLION
ESTIMATED SIZE OF TOTAL GLOBAL FINANCIAL ASSETS[1]

The scale of banking, central bank operations, insurance and capital markets fundamentally shapes the cost and availability of capital in the real economy. When these large pools of assets are aligned with sustainability objectives, they can both accelerate investment in sustainable solutions and facilitate an orderly phase-out of environmentally harmful activities. Ultimately, the size and direction of these financial sectors will determine how quickly economies can transition toward a net-zero, nature-positive and socially equitable future.

Note: The figures on the right are not meant to be cumulative with the USD 486.4 trillion total. They come from different sources and involve significant overlaps (for example, banks, insurers and central banks also hold bonds and equities that are counted in the fixed income and equity market value). The numbers are shown only to illustrate the substantial value of each sub-sector covered by SUSREG.

OVER USD
188.7
TRILLION
GLOBAL BANKING ASSETS[1]

The Global Systemically Important Banks (G-SIBs) are hosted by Canada, China, France, Germany, Japan, the Netherland, Spain, Switzerland, the USA, and the UK.

USD
38.2
TRILLION
TOTAL ASSETS OF INSURANCE CORPORATIONS[1]

The United States, China, the United Kingdom, Japan, France, Germany, South Korea, Canada, Italy, and India were the world's top ten countries by life and non-life direct premiums written in 2023.[2]

USD
272
TRILLION
OF OUTSTANDING FIXED INCOME AND EQUITY MARKET CAPITALIZATION[3]

The United States, China, Japan, the United Kingdom, Canada, Hong Kong, Australia, and Singapore have the largest debt securities outstanding and equity market capitalizations.[3]

USD
37.5
TRILLION
OF CENTRAL BANKS ASSET[1]

The four largest central banks (the US Federal Reserve (FED), the European Central Bank (ECB), the People's Bank of China (PBOC), and the Bank of Japan (BOJ)) hold more assets than all other public (development) banks combined.[1]

[1] At end-2023 according to Global Monitoring Report on Non-Bank Financial Intermediation, FSB, 2024
[2] Swiss Re Institute, sigma, No. 3/2024.
[3] In 2024 based on SIFMA, Capital Markets Fact Book, 2025

RECOMMENDATIONS

RECOMMENDATIONS

The recommendations are structured to support central banks, financial regulators, supervisors, and policy makers at different stages of integrating sustainability into financial regulation and their own practices. "Medium stage" recommendations are designed for authorities that are at the beginning of their journey and need to establish or strengthen foundational sustainable-finance practices.

"Advanced stage" recommendations are intended for regulators that are ready to deepen integration and pilot more complex policies and measures. This staged approach also helps build supervisory capacity incrementally, ensuring that "Advanced-stage" policies are built on a solid foundation of proven "Emerging-stage" practices. Please note that these recommendations should be adapted to the specific mandates of central banks and financial regulators (CBFRs).

RECOMMENDATIONS FOR BANKING & INSURANCE REGULATORS AND SUPERVISORS

LEVEL OF APPLICATION
Medium Stage | Advanced Stage

1 Transition from Soft Guidance to Binding Prudential Requirements

Regulators and supervisors need to shift from non-binding climate and nature-related guidelines to enforceable mandatory supervisory requirements focused on climate and nature risk and impact management grounded in a double-materiality perspective. Voluntary expectations tend to result in uneven implementation, so making requirements mandatory is essential for broad uptake. However, they must be backed by clear enforcement mechanisms to avoid reducing compliance to a simple box-ticking exercise (this is further elaborated under recommendation 4). This will ensure these risks are treated as core prudential issues rather than ancillary ESG issues.

As part of this shift, authorities should make Pillar 3 climate and nature disclosures mandatory for all regulated banks by fully transposing the Basel Committee's Climate-Related Financial Risks (CRFR) templates. Given that the CRFR currently covers only climate, regulators and supervisors could extend the framework to include material nature-related risks. For insurers, supervisors should require equivalent public disclosures across underwriting, reserving, reinsurance, and investment activities.

To ensure consistent scoping and avoid institutions deeming significant risks as "immaterial" supervisors should define standard expectations and minimum criteria for double-materiality assessment, including guidance on how firms should construct their own institution-specific double-materiality matrices for determining what constitutes material climate and nature risks and how they must be evaluated.

2 Step Up Nature-Risk Supervision with a "Nature-as-System" Mindset

Regulators and supervisors should strengthen current supervisory expectations on nature-related risks, which in many cases biodiversity is only referenced as either as part of broad environmental definitions or as illustrative examples, without providing the level of specificity or methodological guidance now common for climate risk. Building on the NGFS perspective that climate-related financial risks are deeply interconnected with broader environmental risks and are therefore considered within the wider scope of nature-related financial risks, supervisors should apply these expectations at both the micro and macro levels to establish clearer and more detailed expectations for nature risks. These include specifying risk drivers, metrics, data needs, and due diligence. Moreover, supervisors should focus on identifying and managing potential environmental tipping points that could lead to significant, irreversible impacts on ecosystems and financial stability.

Expectations should be phased and proportionate, recognizing current data and capacity constraints, but moving progressively toward ensuring that banks and insurers manage nature-related risks with the same rigor and discipline many have applied to climate risk.

Financial authorities should also require banks and insurers to identify and disclose their key nature-related dependencies and impacts (at minimum for water stress, deforestation and land conversion, ocean and marine ecosystems, critical biodiversity areas, and critical ecosystem-service hotspots) based on the specific locations of their exposures. Given that fully granular, asset-level mapping represents a significant data and capacity burden, supervisors should allow interim approaches such as the use of high-quality proxies, sector- and region-level heatmaps, and prioritization of the most material exposures, while requiring institutions to build toward more detailed location-specific assessments over time. This information can then feed supervisory nature scenario analysis and stress tests, with results used to set sub-sector and location-specific risk limits, adjust capital or provisioning expectations where risks are high, and tighten policies for activities that drive significant ecosystem degradation.

3 Integrate Social Dimensions in Climate and Nature Risk Supervision

Regulators and supervisors should treat social risks as an integral channel through which climate and nature risks crystallize on banks and insurers' balance sheets. All regulated financial institutions should be required to identify, assess, and manage material social risks (including those arising from climate change and biodiversity loss that affect communities, jobs, and vulnerable groups) within their core strategy, risk assessment, and disclosure processes.

Supervisors can build this work by assessing how social issues (such as job losses in transition-exposed sectors, community conflict over land use, or health impacts from pollution and extreme heat) could affect borrowers' repayment capacity, firms' operating conditions, and ultimately system-wide financial risks. Findings from this analysis could then be used to calibrate supervisory expectations and identify sectors or regions requiring targeted guidance and monitoring.

RECOMMENDATIONS FOR BANKING & INSURANCE REGULATORS & SUPERVISORS

LEVEL OF APPLICATION
Medium Stage | Advanced Stage

4 Strengthen enforcement action against supervisory expectations

Regulators and supervisors should translate their climate- and nature-related supervisory expectations into clear and enforceable action plans. Governments must ensure that supervisors have clear legal mandates and adequate funding to apply these measures in practice, as gaps in authority and resourcing are often the primary blockers. Many existing expectations set application dates but do not specify when institutions must meet specific requirements or achieve full compliance. This lack of clarity allows room for delays and inconsistent implementation. To close this gap, supervisors can publish and periodically update clear implementation timelines with interim milestones and clearly defined consequences for slippage, and link them to supervisory responses (ranging from risk-mitigation demands and formal supervisory letters, fines, Pillar 2 capital add-ons, or restrictions on certain business activities) in cases where institutions fall short. Where possible, this can be complemented by public progress dashboards showing each institution's performance against their supervisory expectations, allowing peer comparison and strengthening market discipline.

Persistent or material non-compliance should trigger proportionate but escalating measures. This may include time-bound remediation plans, enhanced on-site inspections, suspension of model or regulatory waivers, additional capital or provisioning requirements, public disclosure of non-compliance, and (in severe cases) a reassessment of senior management's and board members' fitness and propriety.

5 Use Regulatory Tools to Disincentivize Misaligned Activities in Climate and Nature Transition Pathways

Regulators and supervisors should publish a clear plan to disincentivize the most environmentally harmful activities that pose material financial risks within the financial system (e.g, unabated coal, expansion of fossil fuel, primary deforestation and other biodiversity-destructive practices). While financial regulators may not have the mandate to phase-out high risk activities, they can utilize a full range of tools at their disposal to discourage such activities because of the risks embedded in their misalignment with climate and nature transition pathways. Prudential authorities already use tools and measures such as large-exposure limits, sectoral capital requirements, and concentration caps where potential risks are mispriced. Applying a similar approach to climate- and nature-critical activities is therefore consistent with their financial stability remit when explicitly anchored in government climate and nature policies.

A credible roadmap should be led by governments and grounded in national 1.5°C-consistent and nature-positive transition plans. It should be developed in close coordination with financial supervisors and regulators. This would involve publishing a science-based list of high-risk sectors and activities aligned with 1.5°C-consistent and nature-positive pathways and setting out minimum expectations for how fast exposures to these activities should fall. This roadmap should be coordinated with national "just transition" policies to manage social risks such as employment impacts and regional lock-in. While the level and pace of the phase-out will differ across countries (reflecting national energy mixes, development priorities, and government transition plans), no jurisdiction is insulated from physical and transition climate and nature risks. In a world of escalating climate and nature pressures, high-emitting and nature-destructive assets are unlikely to remain viable over their expected economic life.

6 Activate Macroprudential Tools and Strengthen Systemic Surveillance

Regulators and supervisors should begin deploying macroprudential tools to address climate and nature risks. In many jurisdictions, these instruments are referenced in policy documents but are still rarely activated, even though they are central to spotting system-wide vulnerabilities and containing risks before they become systemic. Tools such as the Systemic Risk Buffer (SyRB), borrower-based measures, exposure and concentration limits, and system-wide stress tests offer concrete ways to manage risk build-up across the financial system. Regulators should also incorporate climate and nature-related risks into their regular scenario analysis and stress testing, covering areas such as deforestation, freshwater scarcity, ocean degradation, and potential tipping points. These scenarios can help identify vulnerabilities tied to critical environmental thresholds, which could trigger significant financial instability.

As a practical next step, authorities could publish a small set of transparent "watch indicators" that frame supervisory discussions and help determine when temporary buffers or tighter exposure limits are justified. These indicators should prioritize forward-looking metrics (such as portfolio alignment scores or projected exposure to future water stress), complemented by simpler backward-looking measures (such as the share of lending to high-risk sectors), to support a genuinely forward-looking macroprudential stance. Such an approach would strengthen early-warning signals and enhance system resilience as climate and nature risks intensify. However, it is important to note that there are limits to how much macroprudential buffers can shield the system from major environmental risks. Ultimately, the most effective way to protect the financial system is by transitioning to a green economy, reducing exposure to high-risk activities, and fostering long-term sustainability.

RECOMMENDATIONS FOR BANKING & INSURANCE REGULATORS & SUPERVISORS

LEVEL OF APPLICATION
Medium Stage | Advanced Stage

7 Track the alignment of financial flows with a 1.5°C and nature-positive pathway, including exposure to environmental tipping points

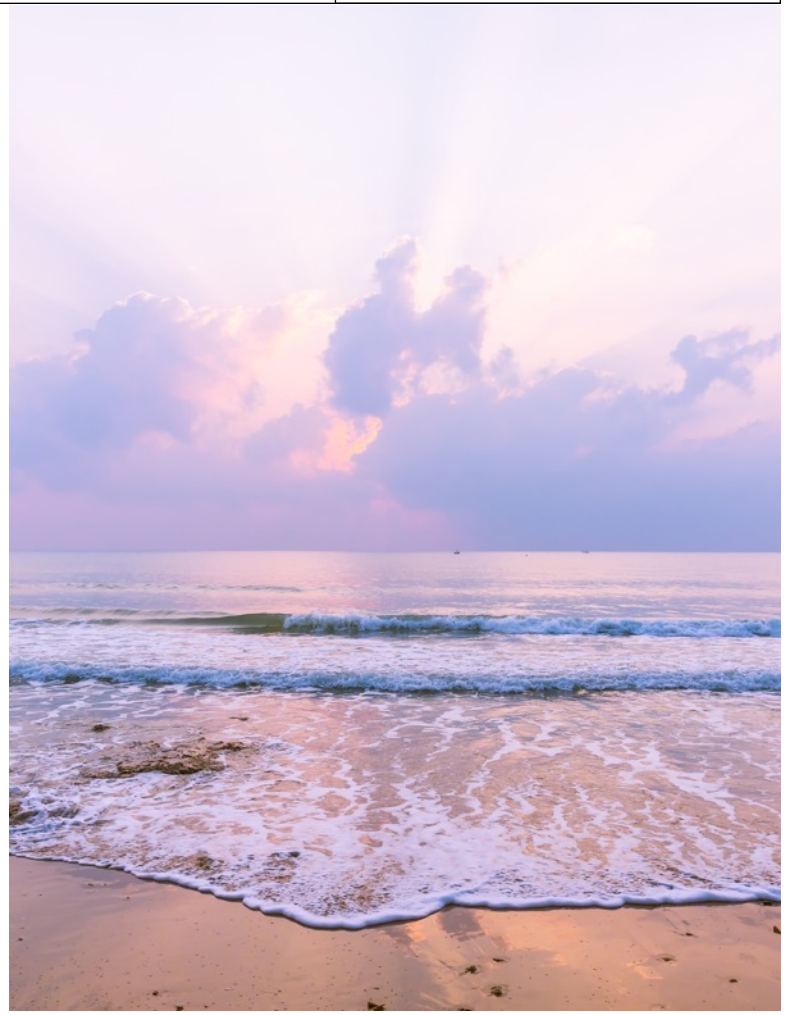
Supervisors could start monitoring the alignment of financial flows with a 1.5°C and nature-positive pathway as an important warning signal for systemic risk. This means tracking where lending and investment are contributing to reducing pressure on critical ecosystems, and where they may instead be pushing them closer to irreversible tipping points. To do this in a consistent way, regulators can define common metrics and benchmarks, collect comparable data from banks and insurers, then carry out their own alignment assessments for high-risk sectors. This should ideally include monitoring flows into adaptation and nature-based solutions, as well as concentrations of exposure in geographies or activities close to potential tipping points in order to safeguard financial stability from systemic environmental risks.

At the firm level, regulators and/or supervisors can require their supervised entities to develop and publish transition plans that set out credible pathways for aligning their portfolios with agreed climate and nature objectives, including clear intermediate targets. Supervisors should also provide standardized methodologies and minimum criteria for what constitutes a “credible, time-bound” transition plan and embed these in their review processes. At a time when voluntary net-zero alliances have weakened and large financial institutions have dropped their 1.5°C commitments, systematic supervisory monitoring and public disclosure become even more important to keep market behaviour gradually moving in the right direction.

8 Start Calibrating Pillar 1 Capital for Environmentally Harmful Exposures

Regulators and supervisors should begin calibrating Pillar 1 capital requirements for always environmentally harmful exposures by proposing and, where the legal framework allows, implementing changes to both the standardized and internal ratings-based (IRB) approaches. Given the risk of international fragmentation and regulatory arbitrage if jurisdictions move in very different directions, this work should be coordinated through global standard-setters (such as the Basel Committee and IAIS) to develop a common, comparable framework for climate- and nature-related Pillar 1 adjustments. This could include sub-sector and location specific risk-weight multipliers under the standardized framework, as well as applying targeted minimum values or limits on key IRB parameters (such as PD and LGD) for activities assessed as having high climate or nature-related risk. Importantly, risk weights should be increased for economic activities that lack transition plans to manage climate and nature risks. However, where credible transition plans are established, risk weights should avoid unnecessary penalization to enable the financing of regions and sectors that are actively preparing for adaptation and transition.

In practice, this means supervisors would set minimum levels for key risk parameters for certain types of exposures, rather than allowing banks’ internal models to drive these parameters to very low levels in ways that may not reflect forward-looking risk. Historical data often fails to capture the severity and non-linearity of future climate- and nature-related shocks. If banks rely solely on backward-looking models, they may systematically underestimate risks in carbon- and nature-intensive sectors and therefore hold insufficient capital against these exposures. To reduce the risk of undercapitalization and systemic mispricing, this calibration work should start early, with supervisors publishing their methodologies, carrying out impact assessments, and adjusting the calibration over time as data, models, and scenarios improve. Where Pillar 1 changes require legislation, authorities should signal the target calibration and use Pillar 2 and macroprudential tools as an interim bridge, including but not limited to add-ons and concentration limits. This ensures that risk is captured in the prudential framework even before statutory reforms take effect and provides a predictable pathway for institutions to adjust balance sheets ahead of binding Pillar 1 changes



RECOMMENDATIONS FOR CENTRAL BANKS

LEVEL OF APPLICATION
Medium Stage | Advanced Stage

1 Build climate and nature aware macro forecasting frameworks

Central banks should systematically include physical and transition climate risks, along with key nature-related factors (such as land-use change, water stress, and the loss of ecosystems and biodiversity) in the baseline and alternative scenarios they use to project growth and inflation. This means modelling how these risks impact productivity, output, and food and energy prices over time. It also involves considering how severe shocks could lead to higher inflation and weaker growth than in a scenario without these pressures. However, this will require substantial investment in new macroeconomic models, as current off-the-shelf frameworks are unlikely to capture the full complexity of climate and nature risks. In particular, these models should incorporate a wide range of uncertainty, as climate and nature-related risks are highly dynamic and often unpredictable. Central banks may need to use integrated assessment models or sector-specific models that better capture environmental factors and their economic consequences. Additionally, blending both qualitative and quantitative approaches will be crucial for understanding long-term risks and their potential short- and medium-term impacts.

Central banks should clearly communicate the main assumptions behind these scenarios, making them accessible to the public. This includes outlining the climate and nature pathways used and the range of possible outcomes. They should also regularly test how their forecasts and policy views would change under more extreme but plausible climate and nature shocks. This approach would help ensure that interest rate decisions and forward guidance take into account long-term climate and nature risks related to price stability.

2 Lead by example through the central banks' own disclosures

Central banks should set an example for climate and nature-related disclosures. They need to apply the same standards of transparency to their own operations and balance sheets that they expect from regulated institutions. This means publishing climate and nature metrics, targets, and methods for monetary policy portfolios, own funds, and pension schemes, aligning with the Task Force on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD) frameworks where possible..

In practice, this could involve disclosing greenhouse gas metrics and sector exposures at the portfolio level. They should report biodiversity pressures using indicators like Mean Species Abundance (MSA). They should also assess and disclose how their portfolios align with sustainable-finance taxonomies, including the proportion of holdings classified as green under the taxonomy. Additionally, central banks can test TNFD-style reporting on key nature dependencies like water, land, and ecosystems. They can further improve their approach by using open-access tools like WWF's Water and Biodiversity Risk Filters. These tools can help screen counterparties and collateral, identify gaps in data and methods, and refine disclosure templates before similar expectations are imposed on supervised entities by regulators.

3 Adjust monetary-policy to incorporate climate and nature risks and impacts

Central banks should integrate climate and nature-related considerations into their risk assessment and monetary policy frameworks, ensuring that tools such as asset purchases, collateral frameworks, refinancing operations, and reserve management to build resilience, limit contributions to long-term risks, and support alignment with climate and nature objectives where permitted within their mandates. By doing so, central banks can signal markets that highly exposed assets carry greater risk, helping to mitigate the build-up of vulnerabilities on their balance sheets and ensuring a more resilient monetary transmission mechanism. This precautionary approach helps address potential future risks before they materialize, safeguarding long-term financial and price stability. Additionally, central banks with relevant mandates can explore green tilted credit allocation strategies that align with long-term stability and resilience objectives.

a. **Asset purchases and reinvestments:** Where corporate asset purchases are used, central banks can tilt reinvestments toward issuers with stronger climate and nature performance, based on transparent criteria

b. **Collateral frameworks:** Collateral eligibility and haircuts can be revised to better account for climate and nature risks

c. **Targeted refinancing:** Central banks could provide incentives for verifiable green, climate, and nature lending. This can involve offering longer-term funding at rates lower than standard facilities, with strict monitoring, reporting, and verification requirements.

d. **Foreign exchange reserves & own portfolios**: In their foreign-exchange reserves and own portfolios (including pension funds), central banks can apply climate, environmental and social (CES) risk controls while maintaining existing safety, liquidity, and return requirements.

e. **Reserve requirements:** Reserve requirements could be adjusted based on climate or nature performance. However, this generally functions as a second-best option compared to targeted refinancing and differentiated collateral haircuts which better fit within existing mandates and frameworks for risk management.

RECOMMENDATIONS FOR CAPITAL MARKETS REGULATORS

LEVEL OF APPLICATION
Medium Stage | Advanced Stage

1 Mandate Sustainability Disclosures for All Financial Products

Regulators should require sustainability-related disclosures for all financial products and asset classes, not only those marketed as green or sustainable. Asset-manager disclosure rules that apply only to “sustainable” products create a two-tier market in which systemic climate and nature risks across mainstream portfolios remain undisclosed and unmanaged. This form of “greenwashing by omission” loophole leaves the vast majority of capital effectively opaque. Periodic reporting and pre-contractual disclosures for all products should then include sustainability aspects to allow investors to systematically assess whether and in what way sustainability issues are considered across every product. To keep this manageable, implementation should follow a tiered approach: full and granular requirements for large asset managers and institutions and simplified “comply or explain” disclosures for smaller firms and simpler products.

This means that asset managers should be required to state whether sustainability issues are integrated into investment decisions for each product, and if not, to explicitly disclose their non-consideration and provide a rationale. Regulators can specify minimum disclosure templates and key indicators to ensure greater uniformity (e.g., contribution to high-emitting or nature-destructive activities, principal adverse impacts) while applying proportionality in terms of depth, frequency, and granularity for smaller entities and low-complexity products.

2 Require Taxonomy-Alignment for Sustainable Bonds

Regulators should anchor all green bonds and sustainability-linked instruments in credible, taxonomy-based standards, moving beyond principle-based guidelines. For all newly issued labelled bonds and sustainability-related investment products (including those entering major indices), regulators should apply pre-issuance screening to verify alignment with science-based green taxonomy criteria.

Index providers and exchanges should be held accountable for flagging or excluding securities that materially breach these criteria. The impact reporting should go beyond the basic use-of-proceeds disclosure to provide evidence of environmental performance and demonstrate how the financed activities remain aligned with taxonomy criteria. This should be supported by clear and proportionate procedures, as well as escalation procedures for breaches. These may include time-bound remediation requirements and, where warranted, withdrawal of the sustainability labels.

3 Enhance Supervisory Powers to Detect and Penalize Greenwashing

Regulators should continue to address greenwashing cases in financial markets as part of their key priority. This includes both explicit misstatements in marketing and disclosures and implicit form of greenwashing, such as using terms like “green”, “sustainable”, or “impact” in a fund’s name without adequate justification. Authorities should conduct targeted inspections and reviews to identify misleading sustainability claims or exaggerations in disclosures, marketing, product labelling, and naming conventions. Authorities should be given the legal power to order corrections and relabelling, impose action plans with deadlines, suspend marketing or distribution, remove non-compliant products, withdraw labels, impose proportionate administrative fines based on Assets Under Management (AUM) or sales, and require restitution when investors were misled.

Strong enforcement measures should be applied. This includes administrative fines, public disclosure of violations, and referrals for civil or criminal litigation in serious or repeated cases, as has happened in several jurisdictions. Sanctions should be proportionate to the severity and scale of each case to ensure effective deterrence and uphold market integrity.

4 Regulate ESG Rating Providers with Robust Governance Standards

Regulators should set minimum standards and rules for all ESG rating providers operating in their jurisdiction. These providers must comply with credible methodology and governance standards. At a minimum, the rules should require providers to publish the methodology for each rating they issue, including a clear explanation of what the rating measures (e.g., climate risk, nature risk, reputation risk, or other dimensions). Providers should also be fully transparent on the use of the data, including sources, estimation rules, timeframes, confidence ranges, and known data gaps.

To avoid conflicts of interest, providers should be expected to keep a clear separation between their rating and commercial functions. Sales, marketing, and business development should not sit on rating committees, influence methodologies, or review draft outputs before publication. Providers should also disclose the payment model for each product. This allows users to judge potential bias. Additionally, providers should not be allowed to offer advisory or consulting services to rated entities. Where such services are offered, the provider should be prohibited from issuing or maintaining a rating for that entity for a defined cooling-off period.

RECOMMENDATIONS FOR GOVERMENTS & POLICY MAKERS

LEVEL OF APPLICATION
Medium Stage | Advanced Stage

1 Establish a stable regime for corporate sustainability reporting

Regulators should mandate corporate sustainability disclosures aligned with internationally recognized frameworks such as TCFD and the ISSB's IFRS S1 and S2, using these as a global baseline and progressively increasing the breadth and depth of reporting in line with Target 15 of the Kunming–Montreal Global Biodiversity Framework. At a minimum, firms should disclose material information on their climate- and nature-related dependencies, impacts, risks and opportunities, using the ISSB financial materiality lens as a baseline and complementing it with an impact (double) materiality perspective consistent with TNFD guidance.

Large and cross-border corporates and financial institutions should be required to set and disclose clear climate and nature targets, publish credible transition plans to meet those targets, and regularly monitor, assess and disclose their risks, dependencies and impacts across operations, supply and value chains and portfolios, supported by robust value-chain due diligence. Once such requirements are in place, regulators should ensure a stable and consistent application. Frequent weakening, deferral, or reversal of agreed disclosure requirements undermines legal certainty, reduces trust, and penalizes firms that have invested in robust reporting systems and internal controls.

2 Cross-Jurisdictional Peer Review and Assistance Mechanism

Regulators could establish cross-jurisdictional peer-to-peer learning platforms to share experience on how supervisory actions enforce sustainability regulations, helping to promote technical consistency and gradual improvement globally. These platforms should also be tasked with identifying and closing loopholes that enable regulatory arbitrage between jurisdictions. Additionally, these platforms could work alongside a structured technical-assistance program, through which more developed authorities provide twinning arrangements, secondments, and access to shared models, datasets, scenario libraries, taxonomies, and analytical toolkits.

Multilateral partners could manage a pooled funding facility to support supervisors with limited resources. This support could include grants for building data systems, improving reporting infrastructure, developing analytical tools, and covering capacity building and training costs. Participating countries could be acknowledged by recognizing their contributions in international initiatives and using this as eligibility criteria for targeted funding. This would create a positive cycle of stronger alignment globally and less regulatory arbitrage across markets.

3 Inter-Agency Green Finance Governance for Climate and Nature Coordination (statutory coordination, joint policy roadmaps, shared data hub)

Governments should establish official green finance committees that include the finance ministry, central bank, financial regulators, environmental and climate agencies, and the national statistics office. The committee should meet regularly and have clear decision-making powers to support the national sustainability agenda. Ideally, agendas and minutes should be published. There should be an annual joint progress report with an advisory panel made up of representatives from industry, academia, and civil society. A single Green Macroeconomic Policy Roadmap should be established for shared goals that connect to mitigation and adaptation targets aligned with key regulatory and legislative priorities.

To complement this, governments could build a central climate- and nature-data platform as the system's "single source of truth." Many relevant datasets are currently scattered across agencies and ministries. For instance, data on electricity consumption by entity, the locations and boundaries of concessions and permits, changes in forest and land cover, water use and scarcity indicators, pollution and emissions inventories, physical-hazard maps (for floods, heat, and wildfires), and critical-infrastructure maps are all highly relevant datasets for market players. These datasets could be consolidated into a shared platform with common identifiers and standards, making them available to financial institutions and other market participants.

4 Mobilize Green and Transition Finance as a Strategic Opportunity

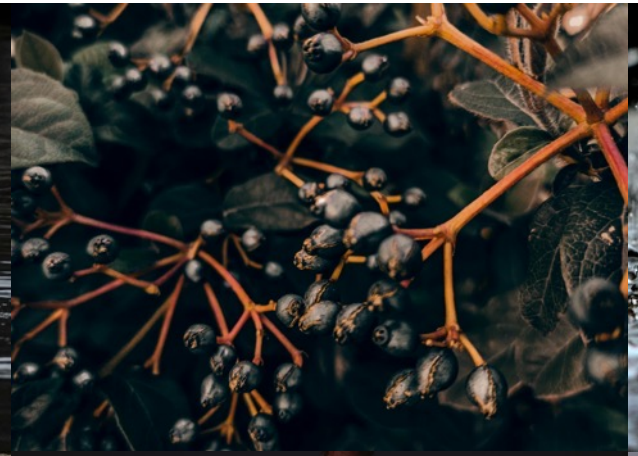
Financial regulators, supervisors, and governments should frame sustainable finance not only as a risk-management imperative but also as a core growth and competitiveness agenda for the financial sector. Clear, usable taxonomies and transition-finance frameworks can help banks, insurers, and investors expand pipelines of bankable and investible green and transition projects, develop new products (such as sustainability-linked loans and bonds), and tap growing global demand for credible sustainable assets.

Public development banks, guarantee schemes, and blended-finance mechanisms can be used strategically to reduce the risk of early-stage innovative projects. By co-financing these first transactions, they allow local financial institutions to gain hands-on experience in appraising, structuring and monitoring investments in emerging green sectors, and to build the internal expertise needed to scale up lending over time. By supporting scalable solutions for SMEs, households, and hard-to-abate industries, authorities can position their financial centers as first movers in facilitating the transition to a climate-resilient and nature-positive economy locally and globally.

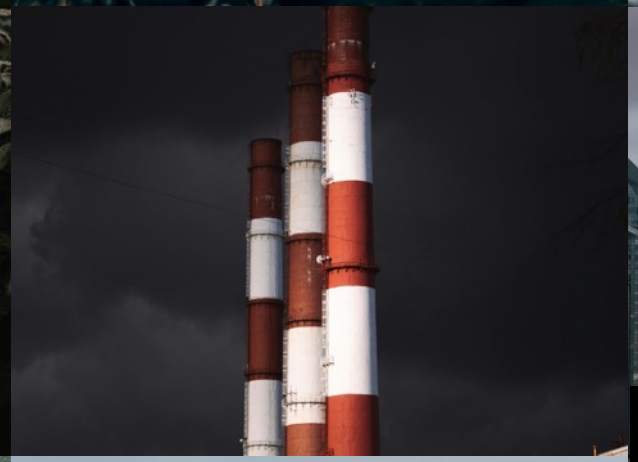
5 Build and use an "Unsustainable (No-Go)" Taxonomy as the enforcement backbone

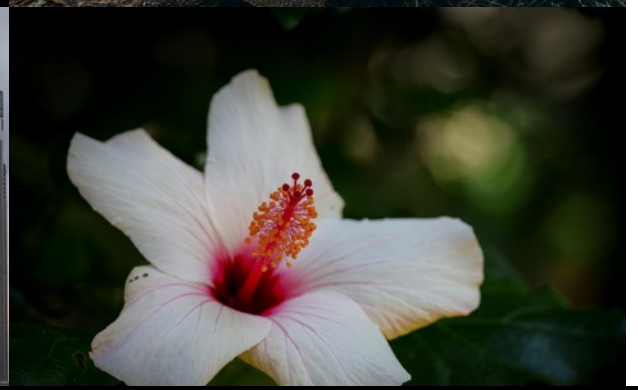
Policymakers should complement green and transition taxonomies with a science-based unsustainable taxonomy, which defines hard exclusions and short, time-bound phase-outs for activities causing significant environmental harm. Such a no-go list should cover climate-related criteria (such as new or expanded unabated coal, oil, and gas extraction and power; methane or flaring intensity above set limits; and lock-in capital expenditure for long-lived high-emitting assets) as well as nature and biodiversity criteria (including the conversion or degradation of high conservation value or high carbon stock ecosystems after a defined cut-off, and industrial fishing or mining in ecologically sensitive areas).

The taxonomy should be linked to key policy levers. For example, it could be mandated as part of product labelling and listing eligibility, prudential supervision such as calculation of risk-weight, monetary policy adjustment and collateral frameworks, and fiscal measures such as targeted taxes, to ensure unsustainable activities are consistently disincentivized across the financial system. Importantly, the unsustainable taxonomy should be embedded within nationally led transition pathways, coordinated internationally to ensure just transition concerns are managed effectively.

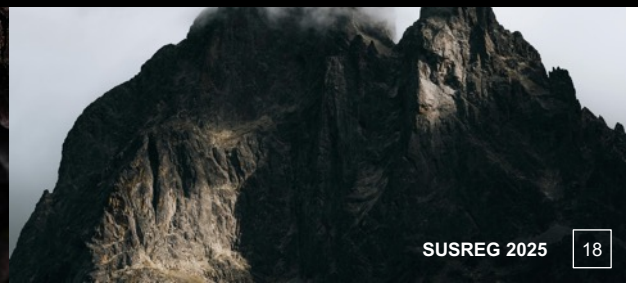













THE SUSREG FRAMEWORK

THE THREE KEY PILLARS OF SUSREG ASSESSMENT

BANKING AND INSURANCE SUPERVISION

This section assesses the maturity of supervisory expectation in using various tools and measures to ensure both the resilience and soundness of individual banks and insurance companies as well as overall financial system stability, with regards to climate, environmental, and social risks. It includes measures that regulators and supervisors themselves can take to demonstrate leadership and strengthen their understanding of ESG risks, their impacts on the financial system, and their implications for the financial sector.

CENTRAL BANKING

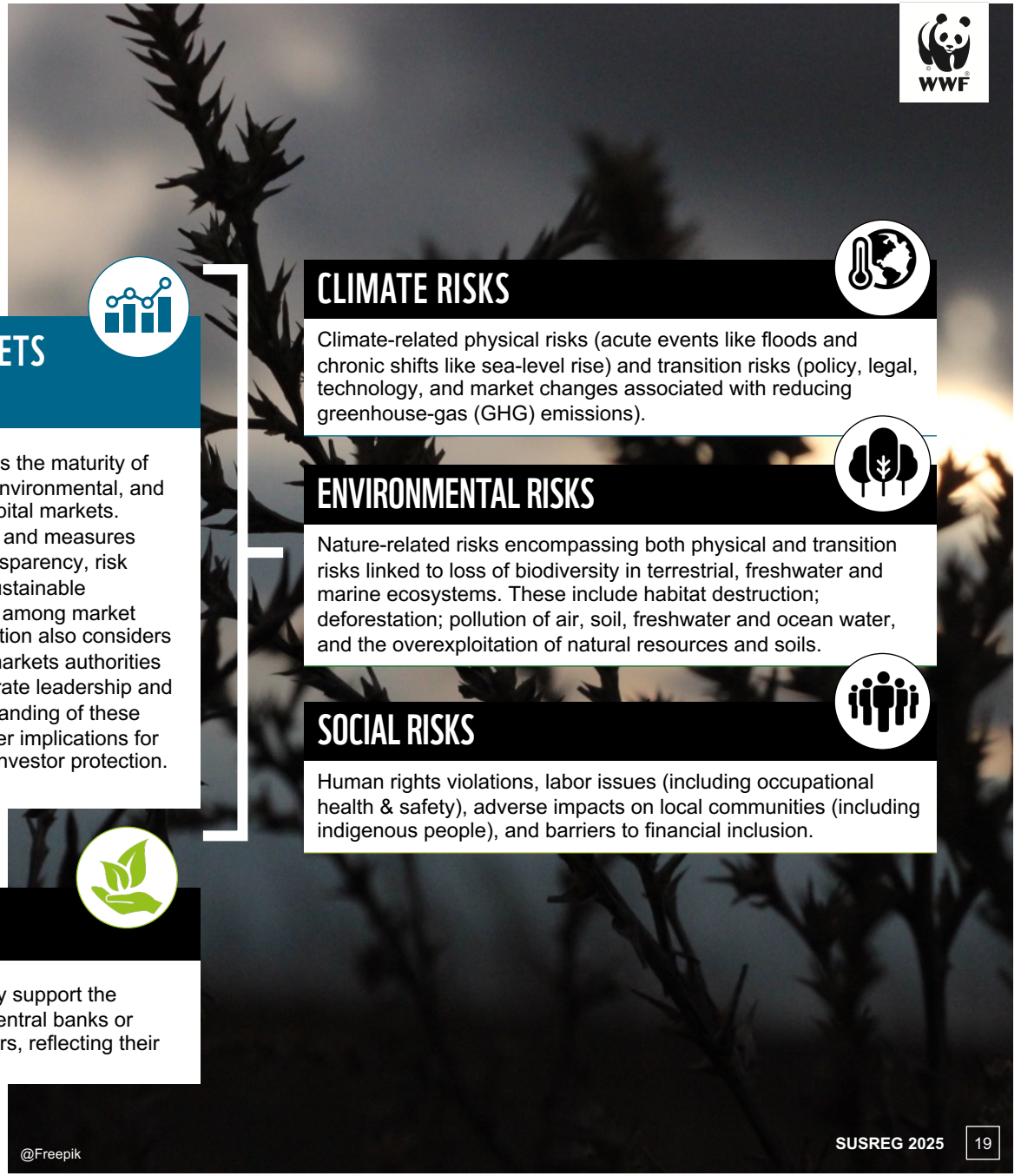
This section assesses various measures that central banks can take to address climate, environmental, and social risks, in keeping with their key mandates of ensuring money supply and price stability. It also includes measures that central banks can take to show leadership and enhance their understanding of these risks and their implications for core central-bank operations.

CAPITAL MARKETS

This section assesses the maturity of integrating climate, environmental, and social risks within capital markets. It evaluates the tools and measures used to promote transparency, risk management, and sustainable investment practices among market participants. The section also considers actions that capital markets authorities can take to demonstrate leadership and deepen their understanding of these risks and their broader implications for market stability and investor protection.

ENABLING ENVIRONMENT & MARKET INFRASTRUCTURE

This section assesses the maturity of the required enabling conditions that would be key for the financial sector to fully support the transition to a low-carbon, resilient and sustainable economy. Some of these measures may be outside the remit of central banks or financial supervisors. The enabling environment and market infrastructure indicators are relevant across all three pillars, reflecting their system-wide importance.



CLIMATE RISKS

Climate-related physical risks (acute events like floods and chronic shifts like sea-level rise) and transition risks (policy, legal, technology, and market changes associated with reducing greenhouse-gas (GHG) emissions).

ENVIRONMENTAL RISKS

Nature-related risks encompassing both physical and transition risks linked to loss of biodiversity in terrestrial, freshwater and marine ecosystems. These include habitat destruction; deforestation; pollution of air, soil, freshwater and ocean water, and the overexploitation of natural resources and soils.

SOCIAL RISKS

Human rights violations, labor issues (including occupational health & safety), adverse impacts on local communities (including indigenous people), and barriers to financial inclusion.

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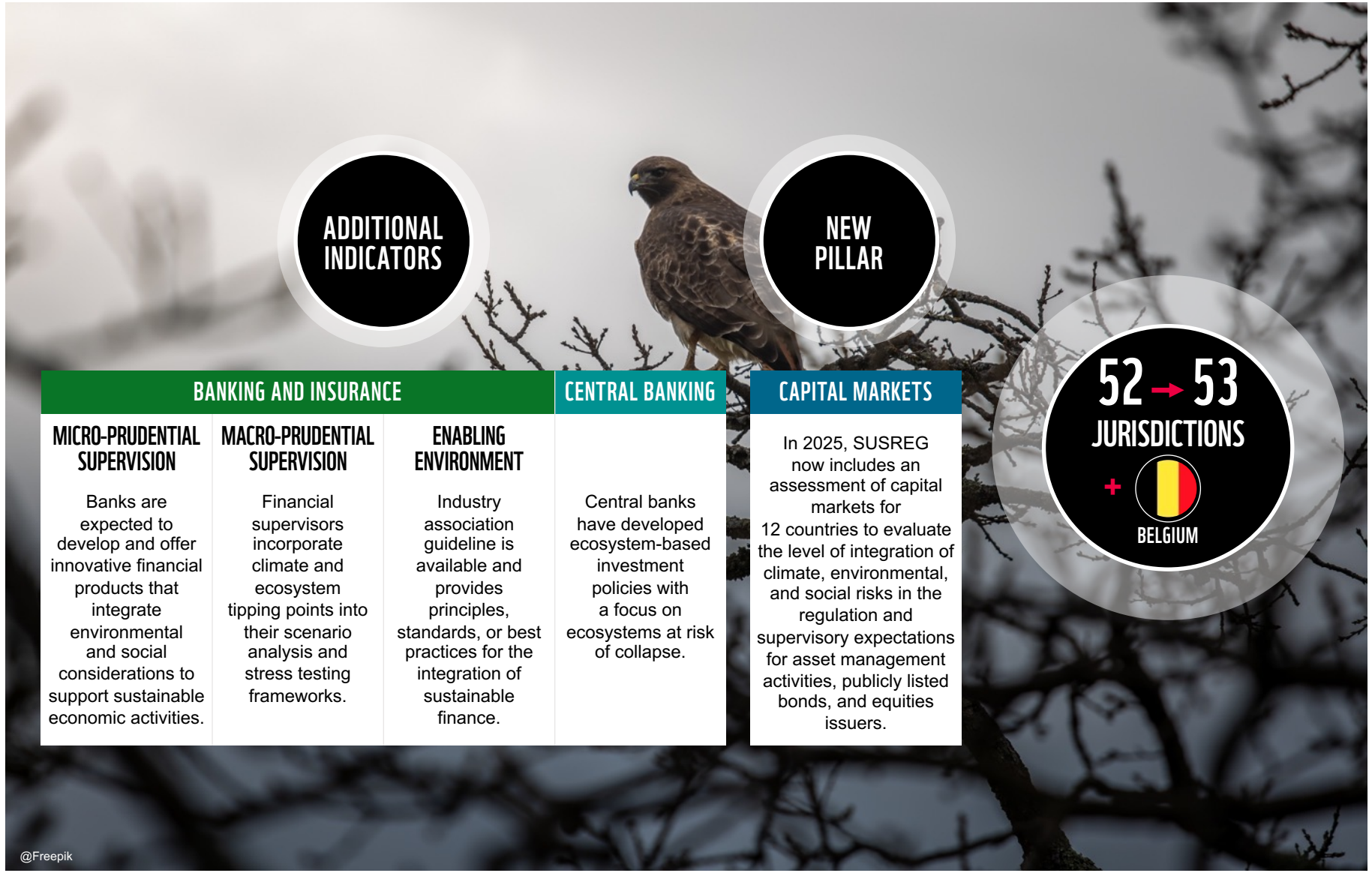
WHAT'S NEW IN SUSREG 2025?



ADDITIONAL INDICATORS

NEW PILLAR

52 → 53 JURISDICTIONS

\+ BELGIUM

BANKING AND INSURANCE			CENTRAL BANKING	CAPITAL MARKETS
MICRO-PRUDENTIAL SUPERVISION	MACRO-PRUDENTIAL SUPERVISION	ENABLING ENVIRONMENT		
Banks are expected to develop and offer innovative financial products that integrate environmental and social considerations to support sustainable economic activities.	Financial supervisors incorporate climate and ecosystem tipping points into their scenario analysis and stress testing frameworks.	Industry association guideline is available and provides principles, standards, or best practices for the integration of sustainable finance.	Central banks have developed ecosystem-based investment policies with a focus on ecosystems at risk of collapse.	In 2025, SUSREG now includes an assessment of capital markets for 12 countries to evaluate the level of integration of climate, environmental, and social risks in the regulation and supervisory expectations for asset management activities, publicly listed bonds, and equities issuers.

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NEW ASSESSMENT SECTION

THEMATIC ASSESSMENT

SUSREG 2025 introduces a new cross-cutting thematic assessment within the banking and insurance pillars, covering (i) deforestation and land-use change, (ii) freshwater, and (iii) ocean health. For each theme, we evaluate whether supervisory frameworks address major drivers of nature loss across the following measures:

- Micro-prudential supervision
- Macro-prudential supervision
- Disclosure requirement
- Taxonomy
- Monetary policy
- Investment of central banks non-monetary portfolios

METHODOLOGY ADJUSTMENT

In 2025, following stakeholder consultations, we tightened the SUSREG methodology in two ways:

1. We reweighted indicators to emphasize measures with greater prudential impact (e.g., higher weights on capital requirements, certain macro-prudential measures, etc); and
2. We raised the evidentiary bar by no longer crediting non-binding industry-association guidelines or stock-exchange disclosure rules as evidence within prudential supervision.

These changes may lower headline scores even when underlying frameworks have not deteriorated. Accordingly, we do not present prior-year comparisons unless restated on the 2025 basis. The revisions apply across all assessment pillars.

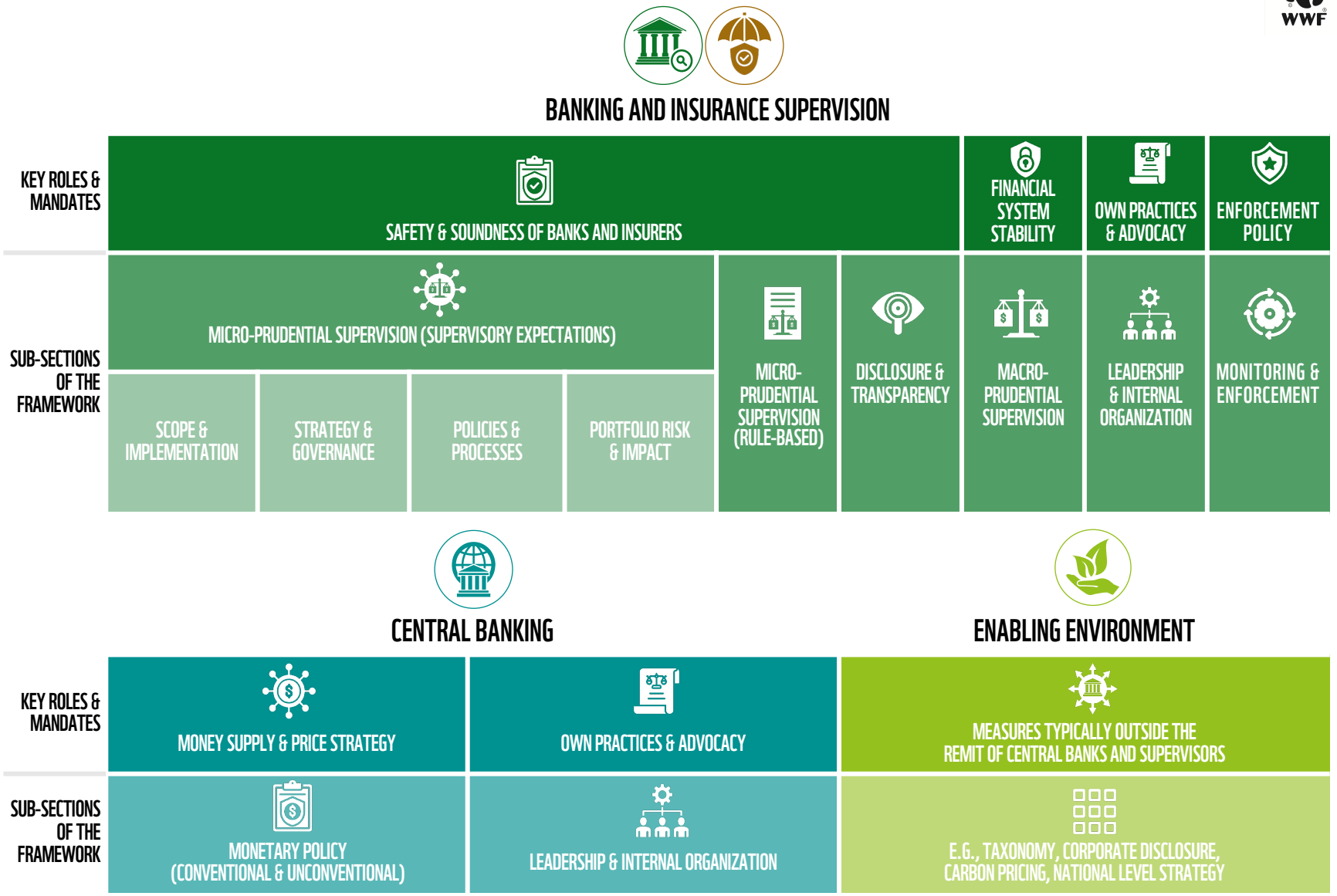
BANKING & INSURANCE FRAMEWORK

The framework's development was informed by:

- WWF's active involvement in leading sustainable finance initiatives, e.g. through its representation on the European Commission's Technical Expert Working Group and its successor Platform on Sustainable Finance;
- WWF's ongoing work with central banks, financial regulators, supervisors and policymakers worldwide, that contributes to shaping the development of sustainable financial regulations and guidelines in key financial markets;
- WWF's perspective as a science-based organization, rooted in conservation work that delivers positive impacts on the ground.

In addition to drawing on this in-house expertise, the development of this framework has built on:

- Current best practices by central banks and supervisors worldwide, as well as the recommendations and publications of the Network for Greening the Financial System (NGFS);
- An extensive review of the literature produced by leading universities, think-tanks and non-governmental organizations on central banking and supervisory practices;
- Key frameworks such as the Task Force on Climate-related Financial Disclosures (TCFD) and Taskforce on Nature-related Financial Disclosures (TNFD).



EXTENSION TO CAPITAL MARKETS

While global financial markets represent hundreds of trillions of US dollars in capital, the flow of green finance remains relatively limited.

For instance, in 2024, global clean energy investment stood at around USD 2 trillion, with the majority concentrated in China, the United States, and the European Union (EU).[1] The number is still far from the target of transitioning to a net-zero economy, which demands more than USD 4.5 trillion in clean energy investment each year.[2] Looking at the bigger picture of the climate financing landscape, annual climate investments are expected to reach between USD 6.3 and 6.7 trillion to stay on track for a global net zero target by 2050.[3]

Building on this urgency, SUSREG expanded its scope in 2025 tto include a pilot assessment for capital markets.

The framework covers key areas, including asset management; bonds labeled as green, social, and sustainable; corporate disclosure for listed companies; and select market infrastructures. Click here to read the full report on the capital markets methodology.

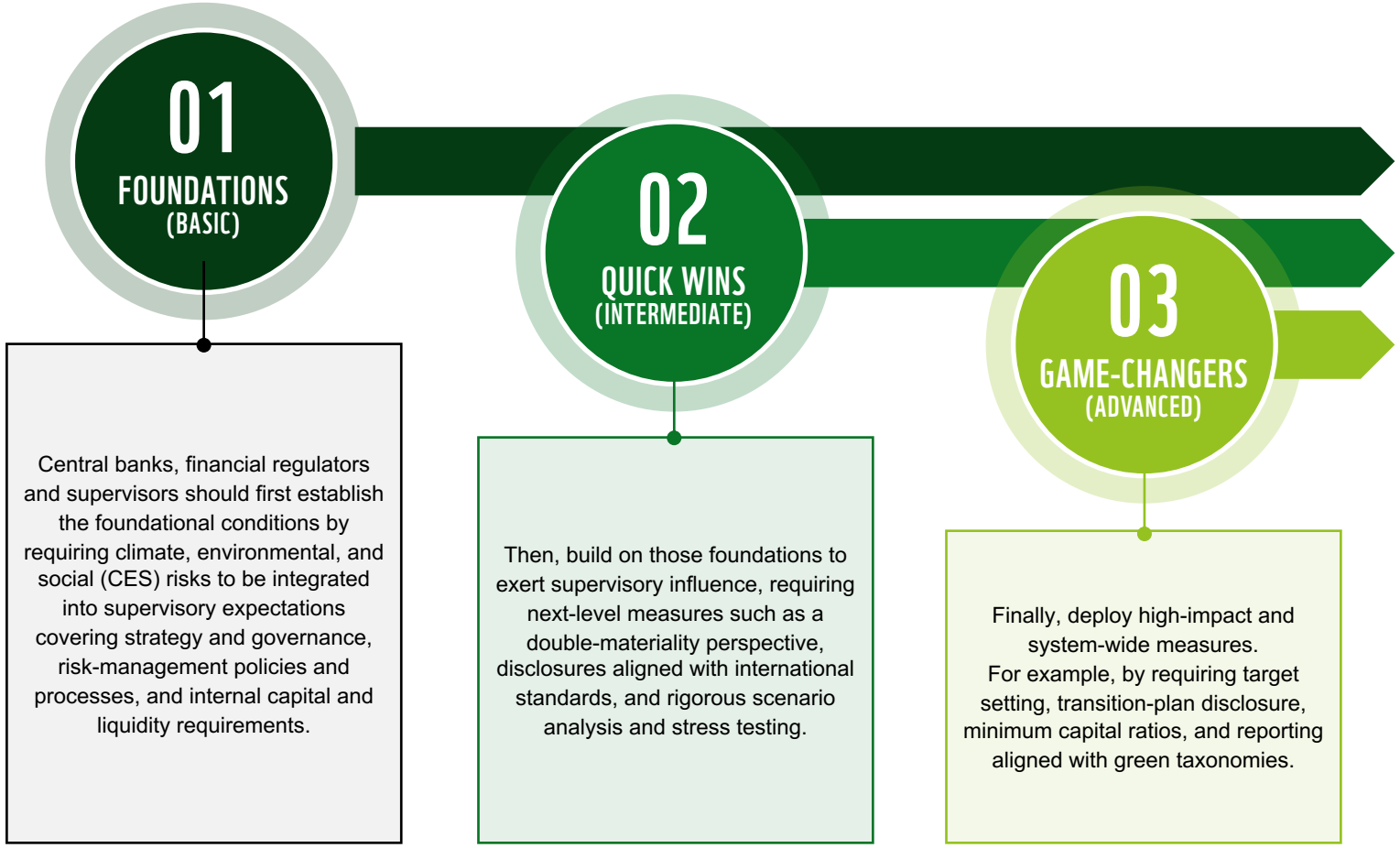
CAPITAL MARKETS

	ASSET MANAGEMENT SUPERVISION	
KEY ROLES & MANDATES	INVESTOR PROTECTION & MARKET INTEGRITY	
SECTION	ENTITY	PRODUCT
INDICATORS	Double materiality, processes and policies, governance, remuneration, alignment with taxonomy, target setting, transition plan	Fund naming, pre-contractual disclosures, periodic disclosures
	ISSUER SUPERVISION	MARKET INFRASTRUCTURE
KEY ROLES & MANDATES	TRANSPARENCY & ACCOUNTABILITY OF LISTED SECURITIES	FACILITATION OF AN INTEGRATED AND COMPLIANT MARKET
SECTION	LISTED BONDS	LISTED EQUITIES
INDICATORS	GSS bond framework, use of proceeds, impact reporting, third party verification	Sustainability reporting, double materiality, external assurance, taxonomy reporting, due diligence, target setting, transition plan

Carbon market, ESG benchmarks, ESG ratings, enforcement actions related to greenwashing

[1] International Energy Agency. (2024). World Energy Investment 2024.
[2] Montague, C., Raiser, K., & Lee, M. (2024). Bridging the clean energy investment gap: Cost of capital in the transition to net-zero emissions (OECD Environment Working Papers No. 245). OECD Publishing.
[3] Bhattacharya, A., Songwe, V., Soubeyran, E., & Stern, N. (2024). Raising ambition and accelerating delivery of climate finance: Third report of the Independent High-Level Expert Group on Climate Finance (IHLEG). Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

BASIC, INTERMEDIATE, AND ADVANCED INDICATORS



HOW DID WE CATEGORISE THE INDICATORS AND WHY?

In assessing the maturity of sustainable finance practices across the selected countries, we categorized the indicators using a qualitative framework based on their impact and implementation complexity. This approach allows us to differentiate between foundational elements that establish basic capabilities, intermediate measures that offer significant benefits with manageable effort, and advanced initiatives that represent transformative changes but require substantial commitment and resources.

Indicators are grouped into three tiers: Basic, Intermediate, and Advanced. Basic indicators are low-complexity, low-to-medium-impact actions that form the essential building blocks of sustainable finance and signal an early stage of maturity. Intermediate indicators offer medium-to-high impact with relatively low-to-medium complexity, providing practical opportunities for progress without excessive resource demands and reflecting a mid-stage level of maturity. Advanced indicators are high-impact, high-complexity policy measures with the potential to reshape financial systems, representing the most mature stage of maturity.

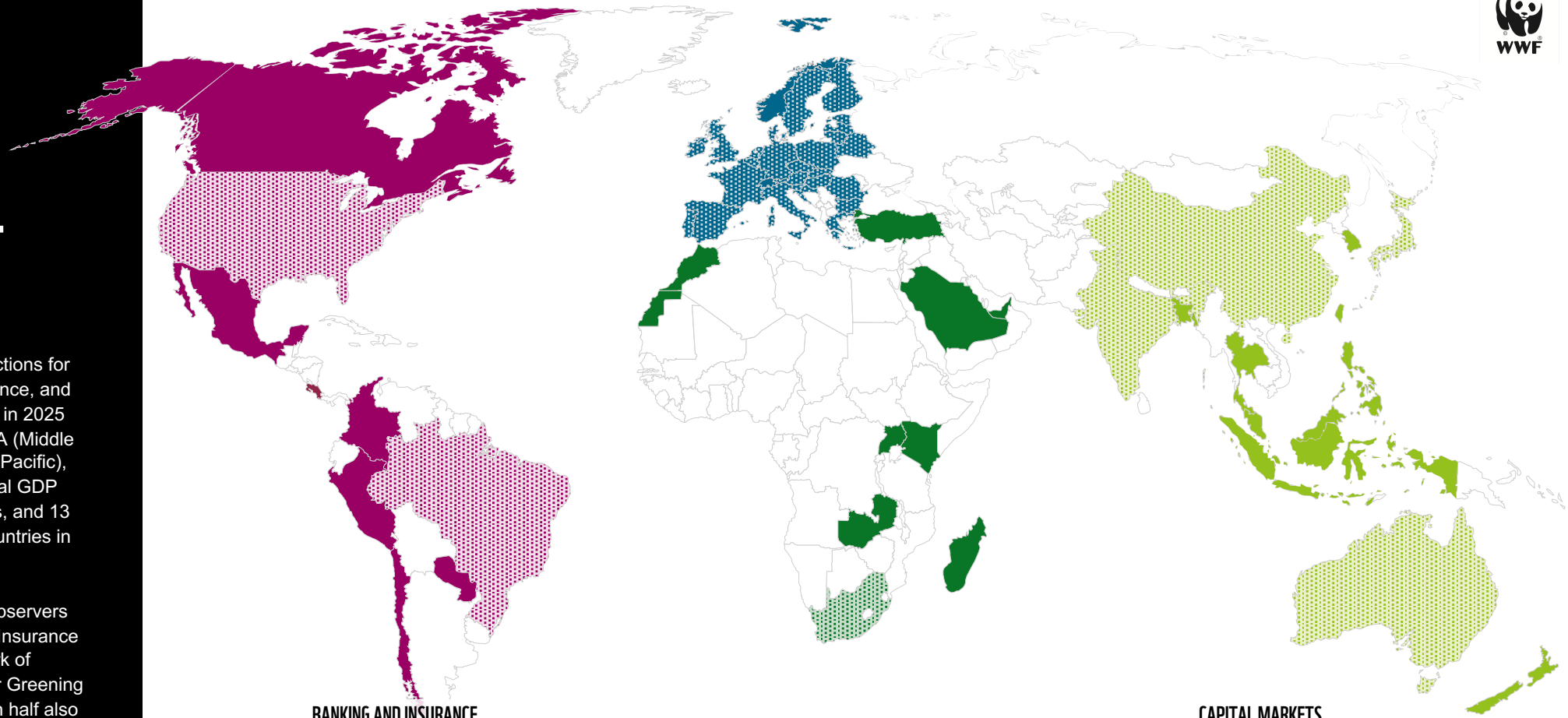
This impact and complexity lens provides a clear, structured way to evaluate progress and identify priorities for further development in the sustainable finance regulatory framework of each country.

GEOGRAPHICAL COVERAGE

The assessment covers 50 jurisdictions for banking, 46 jurisdictions for insurance, and 12 jurisdictions for capital markets in 2025 across the Americas, Europe, MEA (Middle East and Africa), and APAC (Asia Pacific), representing over 89% of the global GDP and 75% of global GHG emissions, and 13 of the 17 most biodiversity-rich countries in the world.

Most of these are members and observers of the International Association of Insurance Supervisors (IAIS) and the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), with half also as members of the Basel Committee on Banking Supervision (BCBS).

We conducted the assessment against the regulations, supervisory expectations, and guidance issued by the central banks, financial regulators, supervisors and relevant authorities in these countries.



BANKING AND INSURANCE

AMERICAS	EUROPE		MEA	APAC	CAPITAL MARKETS
BERMUDA	AUSTRIA	LUXEMBOURG	KENYA	AUSTRALIA	AUSTRALIA
BRAZIL	BELGIUM	NETHERLANDS	MADAGASCAR	BANGLADESH	BRAZIL
CANADA	DENMARK	NORWAY	MOROCCO	CHINA	CHINA
CHILE	EUROPEAN UNION	PORTUGAL	SAUDI ARABIA	HONG KONG	EUROPEAN UNION
COLOMBIA	FRANCE	SPAIN	SOUTH AFRICA	INDIA	FRANCE
COSTA RICA	GERMANY	SLOVENIA	TÜRKIYE	INDONESIA	GERMANY
MEXICO	GREECE	SWEDEN	UAE	JAPAN	INDIA
PARAGUAY	HUNGARY	SWITZERLAND	UGANDA	MALAYSIA	JAPAN
PERU	ITALY	UK	ZAMBIA	NEW ZEALAND	SINGAPORE
USA				PHILIPPINES	SOUTH AFRICA
CALIFORNIA (US STATE)				SINGAPORE	UNITED KINGDOM
NEW YORK (US STATE)				SOUTH KOREA	UNITED STATES OF AMERICA
				TAIWAN	
				THAILAND	

BANKING SUPERVISION

EXECUTIVE SUMMARY OF THE 2025 BANKING SUPERVISION ASSESSMENT

NOTABLE DEVELOPMENTS IN 2025

Supervisory approaches to climate, environmental, and social (CES) risks are moving in different directions. Some authorities are tightening expectations and adding forward-looking tools, others are stepping back. The result is greater divergence in how risks are priced, disclosed, and planned for across borders. This section notes where standards are hardening, where they are loosening, and the implications for bank governance, capital planning, data, and supervisory review. Some key developments this year:

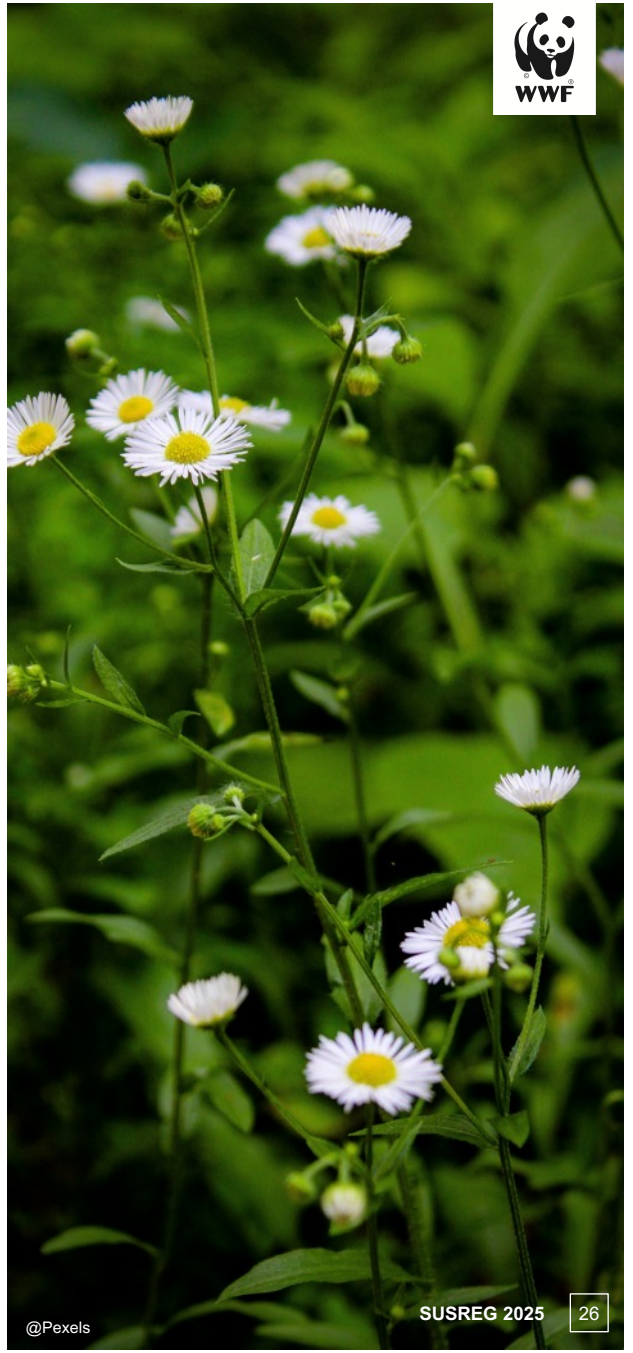
- **United States:** In March 2025, the Office of the Comptroller of the Currency (OCC) withdrew its participation in the Interagency Principles for Climate-Related Financial Risk Management for Large Financial Institutions. Subsequently, on 16 October 2025, the Federal Reserve, the Federal Deposit Insurance Corporation (FDIC) and the OCC jointly announced the withdrawal of these interagency principles, rescinding the climate guidance with immediate effect. As a result, climate risks are now only expected to be managed under existing, non-climate-specific safety-and-soundness standards
- **European Union:** The European Banking Authority (EBA) issued final guidelines (EBA/GL/2025/01) requiring regular ESG materiality assessments, the use of long-term planning horizons of at least 10 years, and the integration of material ESG risks and related plans and targets into ICAAP and risk-management frameworks from 2026 (with a later phase-in for small, non-complex institutions).
- **Switzerland:** The Swiss Financial Market Supervisory Authority (FINMA) published its new circular expecting banks and insurers to integrate nature-related risks in their governance and risk management processes, with gradual integration starting in 2026 and due in full by 2028.
- **Kenya:** The Central Bank of Kenya published a national Green Finance Taxonomy and a Climate Risk Disclosure Framework aligned with IFRS S2 and the Basel Committee's principles, enhancing data quality and comparability.
- **Hongkong:** The The Hong Kong Monetary Authority (HKMA)'s 2024 Sustainable Finance Action Agenda sets supervisory expectations that banks strive for net-zero emissions in their own operations by 2030 and in their financed emissions by 2050 and enhance climate-risk disclosure, signaling clearer expectations on target-setting, transition planning and transparency that will cascade into banks' client engagement.
- **Emerging markets:** Supervisors in Colombia, Morocco, Paraguay, and South Africa have recently issued or strengthened climate- and ESG-risk management and disclosure expectations
- **International framework:** In June 2025, the Basel Committee published a voluntary climate-risk Pillar 3 disclosure framework.

The net effect is a widening dispersion in supervisory stringency across jurisdictions. Where frameworks harden, banks gain clearer planning horizons, stronger scenario use, and more measurable risk targets. Where they soften, opacity rises and model risk (i.e., the risk of decisions based on poorly specified, calibrated, or governed models) increases, heightening the likelihood of capital misallocation and underpricing of climate, environmental, and social (CES) risks.

WHAT TO EXPECT IN THIS SECTION?

This section examines banking supervision through multiple lenses. We map progress across the three indicator tiers (Basic, Intermediate, and Advanced), summarize the banking supervisory measures in G20 jurisdictions, and analyze key indicators on micro- and macro-prudential supervision, with a dedicated deep dive on SUSREG's social-risk assessment. We also benchmark climate and nature supervisory strength against countries stated net-zero commitments and their national biodiversity index, testing the alignment between ambition, ecological context, and prudential practices.

We further highlight selected good practices, including the Central Bank of Kenya's collaboration with the EIB on a climate-risk disclosure framework and green taxonomy, and the Reserve Bank of New Zealand's integration of social considerations (particularly the needs and rights of Indigenous communities) into access to finance and risk-weight calibration.



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BANKING SUPERVISION INDICATORS

BANK PRACTICES						SUPERVISOR PRACTICES		
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
SCOPE & IMPLEMENTATION	STRATEGY & GOVERNANCE	POLICIES & PROCESSES	PORTFOLIO RISK & IMPACT	CAPITAL & LIQUIDITY REQUIREMENTS	DISCLOSURE & TRANSPARENCY	MACRO-PRUDENTIAL	LEADERSHIP & INTERNAL ORGANISATION	MONITORING & ENFORCEMENT
Regulations or guidance issued	Business & risk strategy	Sector policies	Portfolio management	Integrating E&S into ICAAP	Disclosure of business policies & processes	Supervisor's scenario analysis & stress testing	NGFS membership for supervisors	Monitoring report
Risks coverage	Risk appetite statement	Standards & certification	Scenario analysis & stress testing	Minimum capital ratios	Transition plan disclosure	Scenario analysis & stress testing method	Supervisor's E&S strategy & transition plan	Intervention action
Double materiality	Long-term consideration	Client support on international standard	Management of negative E&S impacts	Liquidity risk management	Internationally recognised reporting frameworks disclosure	Tipping point in scenario analysis	Internal organisation & resources (FS)	
Beyond lending	Board communication	High risk sectors guidance	Climate target setting	Minimum liquidity ratios	Disclosure in annual report	Scenario analysis & stress testing result	Study on banking's exposure	
Supervisory monitoring	Remuneration policy	Integration in policies & processes	Nature target setting		Sub-sectors credit disclosure	Risk indicator monitoring	Alignment to sustainability goals	
Public consultation	Staff & resources	Three lines of defence	Management of reputation & litigation risk		Disclosure against taxonomy	Exposure limit	Staff training	
	Board appointments	Non-compliance mitigation	Validation of outsourcing services		Disclosure of portfolio exposure & mitigation	Systemic risk buffer capital requirement	Data quality initiatives	
	Board responsibilities	E&S credit clauses			Disclosure of negative E&S impact			
	Executive management responsibilities	Active client engagement			External assurance for the disclosure			
	Core functions	Data & IT infrastructure						
	Training							
	Stakeholder engagement							
	Product development							

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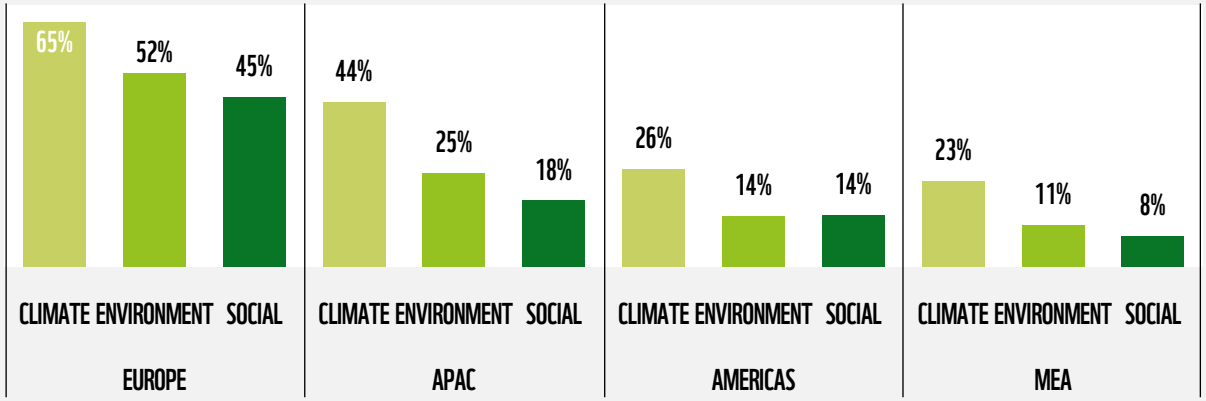
The Reserve Bank of India launched the Climate Risk Information System (RB-CRIS) in May 2025 *as a two-part platform to bridge persistent gaps in climate-related financial information. The system brings together a public directory, a web base directory listing various data sources (meteorological, geospatial, etc) and a restricted data portal for regulated entities offering processed, standardized hazard and exposure datasets to support risk assessment and mitigation. The initiative follows the RBI's 2024 announcement of RB-CRIS as a tool to deliver higher-quality, comparable climate data for supervised institutions and to strengthen risk management across the financial system.*

Canada's ***Office of the Superintendent of Financial Institutions (OSFI) updated its Guideline B-15: Climate Risk Management*** *in March 2025. OSFI emphasizes capital and liquidity adequacy for climate risk. Under Principle 5, a federally regulated financial institution (FRFI) should maintain sufficient capital and liquidity buffers for its climate-related risks, incorporate climate risks into the ICAAP or ORSA, and reflect climate drivers in its liquidity risk profile. Firms should integrate severe-yet-plausible, FRFI-specific and market-wide climate stress events when assessing liquidity buffer adequacy.*

The Prudential Authority of the ***South African Reserve Bank published its Climate Roadmap 2024–2026 in May 2024.*** *It sets out plans to develop climate-risk regulatory and supervisory tools to strengthen financial-sector resilience. The PA will produce discussion documents, guidance notes, observation reports, climate-risk indicators, and supervisory case studies and training materials, and will embed these into practice via industry engagements, workshops and roundtables, supervisory training programs, and a standardized reporting template.*

POSITIVE OUTLOOK IN EUROPEAN AND APAC BANKING SUPERVISION, BUT OPPORTUNITIES FOR IMPROVEMENT REMAIN IN OTHER REGIONS

FIGURE 1: AVERAGE FULFILMENT OF SUSREG BANKING-SUPERVISION INDICATORS BY TOPIC AND REGION IN 2025



The European Central Bank (ECB) reports clear supervisory follow-through and measured progress against its climate and environmental guidance issued in 2020*. By end-2024, banks' practices aligned with its expectations improved, with 56% of banks displaying "leading" practices (vs. 3% in 2022), while those with no practices fell to 5% (from 25%). All banks now include climate risk in their stress-testing framework (41% in 2022). Since March 2023, the ECB issued 28 binding decisions on strengthening internal risk management to start properly considering C&E risks, 22 of which involved the potential imposition of periodic penalty payments (PPPs) if banks failed to meet the requirements set out in these decisions, nine outlier banks received further decisions after the 2023 deadline as they did not have the foundational elements in place. To support banks, the ECB announced it will publish an updated compendium of good practices later this year, building on insights from prior climate stress tests and thematic reviews. The ECB also conducted an industry dialogue in Oct 2025 and plans to conduct more formal assessment in 2027.*

Note: Following methodological consultation, we reweighted indicators and raised the evidentiary bar by excluding non-binding industry guidance and stock-exchange rules. As a result, scores may decline without underlying regulatory change, hence, we do not present prior-year comparisons unless restated on the 2025 basis.

CLIMATE

Climate risks integration generally sees the highest fulfilment across all assessment pillars. In the SUSREG assessment, all covered EU jurisdictions score above 50% alignment on climate-risk integration, supported by the EBA's 2025 Guidelines on the management of ESG risks and ongoing SSM supervisory expectations based on the ECB guide on climate and environmental risks. At the same time, the Commission's 2025 Omnibus simplification package, if adopted as proposed, would narrow the scope and delay key elements of the sustainability disclosure regime for companies, by raising thresholds and delaying certain CSRD/CSDDD obligations.

Accelerated progress in APAC reflects prudential guidance and transition-planning moves**.** Singapore has issued environmental-risk management guidelines for banks and consulted detailed transition-planning guidance for banks, insurers and asset managers. Hong Kong's 2024 Sustainable Finance Action Agenda signals "comply or explain" transition plans from 2030, and Australia's APRA continues to embed Prudential Practice Guide CPG 229 and to run climate-risk self-assessments across regulated entities.

ENVIRONMENT

Broader environmental risks still trail climate in supervision, but momentum is building. Switzerland's FINMA has issued a dedicated circular on nature-related financial risks: the circular enters into force in stages from January 2026 for climate-related financial risks, with full coverage of other nature-related risks applying from January 2028. EU-level rules, including the EBA ESG-risk Guidelines and ESRS standards such as E4 Biodiversity & Ecosystems, are being transposed into member-state frameworks. Non-EU European peers (Norway, Switzerland, UK) generally show lower overall fulfilment in the SUSREG assessment.

In MEA and the Americas, most prudential initiatives still concentrate on climate risks, with limited explicit nature-specific integration to date, except in Brazil. The Central Bank of Brazil's framework on social, environmental and climate risks, and its evolving climate and nature-related disclosure requirements, represent a more integrated approach. In APAC, early steps on nature are emerging: Malaysia's VBIAF sectoral guides and Bank Negara Malaysia's collaboration with the World Bank on nature-related financial risk assessment illustrate a pragmatic and phased pathway beyond climate and towards TNFD-aligned approaches.

SOCIAL

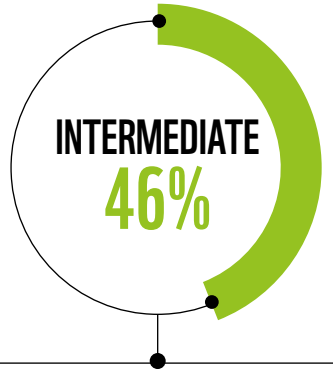
As in previous SUSREG assessments, the social pillar remains less developed than climate and environment. Social risks and impacts should be considered in parallel with climate and environmental factors, given society's dependence on natural resources and the growing effects of resource degradation and the climate crisis on livelihoods.

In jurisdictions with lower regulatory maturity, supervisors understandably prioritize climate first. As frameworks evolve, nature-related considerations are beginning to enter supervisory expectations, disclosures and internal organization. On this trajectory, proportionate progress on social risk is expected to follow, building on a more robust climate- and nature-risk foundation

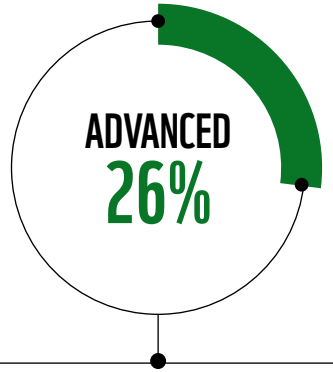
SUPERVISORS HAVE MADE SIGNIFICANT PROGRESS ON BASIC INDICATORS (64%), BUT ADVANCEMENT ON MORE COMPLEX INDICATORS HAS STAGNATED, REACHING ONLY 26% FOR ADVANCED INDICATORS

FIGURE 2: AVERAGE ACHIEVEMENT OF CLIMATE AND ENVIRONMENT BANKING-SUPERVISION IN JURISDICTIONS BY CATEGORY

- Regulations or supervisory expectations are in place
- Coverage of C&E issues
- Supervisory monitoring
- Governance & strategy
- Integration in policies & processes
- Bank reputation and litigation risk management
- Portfolio risk management
- ICAAP & internal liquidity management
- NGFS membership for supervisors
- National multi-stakeholder initiatives



- Double materiality
- Stakeholder engagement
- Client engagement
- Data infrastructure by the banks
- Disclosure in annual report and following internationally recognised reporting frameworks
- Scenario analysis & stress test by supervisor
- Supervisor's transition plan
- Supervisor's study on banking exposure to C&E risks



- Sector policies
- Integration of nature-related risks
- Bank's transition plan
- Climate and nature target setting
- Scenario analysis & stress testing by banks
- Management of negative C&E impacts
- Minimum capital and liquidity requirements
- Systemic risk buffer capital requirement
- Disclosure against taxonomy

Note: The number displayed on the graph represents the average fulfillment of indicators for the climate and environmental assessment. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

- The SUSREG indicators are split into three groups, depending on their perceived level of complexity and impact: basic, intermediate, and advanced. Please see page 23 on the definitions of these categories and how supervisors are expected to improve their fulfilment of gradually more advanced measures.
- On average, 64% of basic indicators have been achieved by the countries assessed. This includes indicators such as the incorporation of climate and environmental considerations in Internal Capital Adequacy Assessment Processes (ICAAPs) as well as into strategies and portfolio risk management. However, the challenge is moving from foundational frameworks to more impactful measures.
- Under intermediate indicators, we observe a lower level of achievement at 46%. The lower rate of fulfillment reveals the hurdles in tackling more complex matters, including double materiality and disclosure alignment with international frameworks.
- The advanced indicators show the lowest level of achievement, with only 26% fulfilled. Requirements for scenario analysis & stress testing and having sector policies see the highest fulfillment across the assessed countries. By contrast, the integration of climate and environmental risks into liquidity and capital ratios remain nascent.
- In summary, supervisors have put many foundational pieces in place through climate guidance, but tighter, more prescriptive measures, particularly across intermediate and advanced indicators, will be essential to close the gap.

***Bank Al-Maghrib's Directive n°1/W/2025 (Jan 2025) requires banks to publish information on the quantitative and qualitative targets they set internally**, as well as those set pursuant to legal or regulatory provisions, and their progress in meeting these objectives. Banks must disclose targets by specifying the indicators used, the purpose of each target (including mitigation, adaptation, or alignment with a scientific framework), the applicable time horizon, the influence of international agreements and national commitments on target-setting, and progress against each target, including an analysis of performance trends and variations.*

G20 PROGRESS IN BANKING SUPERVISION ACROSS KEY POLICY LEVERS

	AUSTRALIA	BRAZIL	CANADA	CHINA
SUPERVISORY EXPECTATIONS	▪ Climate	▪ Climate, environment, and social	▪ Climate	▪ Climate, environment, and social
MATERIALITY SCOPE	▪ Financial materiality	▪ Financial materiality	▪ Financial materiality	▪ The prudential lens focuses on financial materiality, though wider environmental impacts are referenced in policy guidance.
TARGET SETTING AND TRANSITION PLANNING	▪ No prudential mandate to set Paris-aligned targets. Many banks set targets voluntarily. Separately, Australia's mandatory climate-disclosure regime (Corporations Act amendments; AASB S2 based on IFRS S2) will require disclosure of transition plans where they exist for in-scope entities from FY beginning on or after 1 Jan 25, 1 July 26 and 1 July 27. However, it does not require banks to publish climate or nature targets.	▪ Disclosure of strategy is required, but a mandated transition plan is not. The GRSAC disclosure standard by the Banco Central do Brasil (BCB) requires banks to disclose governance, strategy impacts under scenarios, and risk management processes. ▪ It does not compel a Paris-aligned plan, though firms may disclose plans voluntarily.	▪ Guideline B-15 by the Office of the Superintendent of Financial Institutions (OSFI) expects federally regulated financial institutions (FRFI) to develop and implement a climate transition plan and to monitor internal metrics/targets consistent with that plan. it does not mandate specific (e.g., Paris-aligned) targets.	▪ No hard mandate. There is no national prudential requirement to set Paris-aligned targets or file a formal transition plan. Disclosure rules expand environmental/climate reporting, but do not compel target-setting.
CAPITAL REQUIREMENT	▪ No dedicated climate capital charges. Australian Prudential Regulation Authority (APRA) expects ICAAP integration of climate risks and may address weaknesses through the supervisory review (Pillar 2) case-by-case; no standardized add-ons announced.	▪ Social, environmental and climate risks are part of capital management structures (i.e., ICAAP expectations) but no dedicated climate capital charge is prescribed.	▪ B-15 requires FRFIs to incorporate climate risks into ICAAP/ORSA and to maintain sufficient capital/ liquidity buffers for climate risks, there is no dedicated climate capital charge	▪ Guidance expects banks to embed C/E/S risks into governance, risk and capital management (ICAAP). There are no climate-specific Pillar 1 risk weights at this stage.
DISCLOSURE AGAINST TAXONOMY	▪ No requirement for banks to disclose the share of their lending portfolio aligned with a taxonomy.	▪ Not yet mandatory. Brazil's sustainable taxonomy was approved in August 2025, supervisors have not required banks to publish green assets ratio.	▪ No requirement yet. Canada is developing a national green/transition taxonomy (Taxonomy Roadmap endorsed Sept 2022, government announced plans in 2024), but banks are not currently required to publish taxonomy-alignment ratios.	▪ Banks are assessed under the People's Bank of China (PBOC) Green Finance Evaluation Program (GFEP) on green credit/bond holdings based on its green taxonomy, this feeds into supervisory assessments and incentives. China updated its Green Finance Endorsed Project Catalogue in July 2025.
MACRO-PRUDENTIAL SUPERVISION	▪ APRA ran a Climate Vulnerability Assessment (CVA) with the five largest banks in 2021–2022 using NGFS scenarios but has not introduced climate-specific buffers or sectoral capital tools at system level.	▪ The BCB has run climate stress tests and published methodology/findings in the Financial Stability Report (e.g., drought physical-risk sensitivity). No climate-specific buffers announced.	▪ OSFI and the Bank of Canada ran a pilot climate scenario analysis with six FRFIs (final report Jan 2022). OSFI has since launched a standardized climate scenario exercise for periodic supervisory assessment, but no climate-specific capital buffers/sectoral tools have been imposed system-wide.	▪ The PBoC ran a nationwide transition-risk climate stress test in 2021 with 23 major banks (first phase), focused on higher emissions-costs in carbon-intensive sectors; results were publicly reported in early 2022.

G20 PROGRESS IN BANKING SUPERVISION ACROSS KEY POLICY LEVERS CONT.

	EU	FRANCE	GERMANY	INDIA
SUPERVISORY EXPECTATIONS	▪ Climate, environment, and social	▪ Climate, environment, and social	▪ Climate, environment, and social	▪ Climate
MATERIALITY SCOPE	▪ Prudential supervision remains anchored in financial (single) materiality, while disclosure through the Corporate Sustainability Reporting Directive (CSRD)/European Sustainability Reporting Standards (ESRS) use double materiality. ▪ As per the European Banking Authority's guide, banks are expected to consider adverse impacts where they create financial, reputational, legal, or business-model risks.	▪ Follows EU requirements	▪ Follows EU requirements	▪ Financial materiality
TARGET SETTING AND TRANSITION PLANNING	▪ CSRD/ESRS E1 require disclosure of a climate transition plan (E1-1) and targets where climate is material. ▪ Under ESRS E4 – Biodiversity & Ecosystems, in-scope issuers (including listed insurers) must disclose, where the topic is material, a transition plan and how biodiversity and ecosystem impacts, dependencies, risks and opportunities are reflected in strategy and the business model (E4-1) ▪ The EU Corporate Sustainability Due Diligence Directive (CSDDD) further requires large companies to have a plan compatible with the 1.5°C (Paris) objective. ▪ Separately, per Capital Requirements Directive (CRD VI), banks must prepare prudential transition plans for supervisors from 2026.	▪ Follows EU requirements	▪ Follows EU requirements ▪ Germany is in the process of transposing the CSRD, but the implementation act has not yet entered into force. ▪ Germany is preparing for the transposition of the EU CSDDD. In September 2025, the Federal Cabinet approved a draft bill to amend the German Supply Chain Due Diligence Act (LkSG) as an interim easing measure, and the legislative process is still ongoing.	▪ No mandate for banks to set climate/nature targets or publish transition plans; the 2024 draft is a disclosure framework rather than a target-setting rule.
CAPITAL REQUIREMENT	▪ Expect integration of C/E/S risks in ICAAP and SREP. There is no dedicated Pillar 1 climate charge yet, though EBA has studied targeted Pillar 1 enhancements.	▪ Follows EU requirements	▪ Follows EU requirements	▪ No explicit capital requirement or mandatory ICAAP add-ons for climate risks to date
DISCLOSURE AGAINST TAXONOMY	▪ EBA's binding Pillar 3 ITS require disclosure of the Green Asset Ratio (GAR) using standard templates.	▪ Follows EU requirements	▪ Follows EU requirements	▪ RBI requires proceeds from green deposits to be allocated in line with the official Indian green taxonomy; pending its finalization, banks must use a list of eligible activities adopted from India's sovereign green bond framework.
MACRO-PRUDENTIAL SUPERVISION	▪ Conducted EU wide fit for 55 scenario analysis, authorities are exploring use/design of a systemic risk buffer for climate, but broad application hasn't materialized yet.	▪ The ACPR conducted climate stress tests across banks & insurers (2020–21) with published methods/results; second exercise (2022–24) focused on insurers, results published May 2024.	▪ No specific climate capital buffer or borrower-based tool yet; supervisors instead use system-wide climate stress testing and data collections. A recent Bundesbank Discussion Paper (2025) sets out a novel climate-risk stress-test framework quantifying transition risks for a large sample of German banks.	▪ RBI has undertaken system-wide climate scenario analysis / stress-testing work (kicked off after the 2022 discussion paper), but no dedicated climate capital buffer/borrower-based macro tool has been introduced.

G20 PROGRESS IN BANKING SUPERVISION ACROSS KEY POLICY LEVERS CONT.

	INDONESIA	ITALY	JAPAN	MEXICO
SUPERVISORY EXPECTATIONS	▪ Climate, environment, and social	▪ Climate, environment, and social	▪ Climate	▪ No formal climate/environment/social risk supervisory expectations for banks
MATERIALITY SCOPE	▪ Financial materiality with limited impact elements in reporting	▪ Follows EU requirements	▪ Financial materiality	▪ No supervisory expectation yet
TARGET SETTING AND TRANSITION PLANNING	▪ Banks must file Sustainable Finance Action Plans (RAKB) comprising a 5-year plan and an annual (1-year) plan, as required by POJK 51/2017	▪ Follows EU requirements ▪ However, Italy has not yet transposed the CSDDD into national law.	▪ No regulatory mandate for banks to adopt net-zero targets or publish transition plans. ▪ Separately, for listed entities, Japan's Sustainability Standards Board of Japan (SSBJ) issued ISSB-aligned disclosure standards (Mar 2025), the Climate Standard requires disclosure of transition plans if an entity has one (i.e., not a mandate to have a plan). Application is phased for listed companies.	▪ No requirement
CAPITAL REQUIREMENT	▪ No climate-specific capital requirements and no mandate to integrate C/E/S into ICAAP at this stage	▪ Follows EU requirements	▪ No climate-specific capital requirement and no explicit mandate to integrate C/E/S in ICAAP; supervision proceeds through risk-management guidance and dialogue.	▪ No adjustment to capital requirement nor ICAAP mandate to integrate C/E/S at this stage.
DISCLOSURE AGAINST TAXONOMY	▪ Voluntary disclosures against the Indonesia Green Taxonomy, with requirement for accurate classification and implementation if utilized.	▪ Follows EU requirements	▪ No requirement for banks to disclose against a green taxonomy Japan does not yet have an official, economy-wide green taxonomy in force.	▪ No requirement for banks to disclose against a taxonomy.
MACRO-PRUDENTIAL SUPERVISION	▪ The Indonesia's financial service authority (OJK) ran an initial bottom-up Climate Risk Stress Test (CRST) in 2023 with banks in its climate risk task force as a joint learning exercise, then in March 2024 issued a full Climate Risk Management & Scenario Analysis (CRMS) 2024 toolkit (Books 1–6) ▪ Bank Indonesia employs several macro-prudential incentives to steer credit toward green activities, including reserve-requirement relief (via KLM) for lending to priority/green sectors, borrower-based "green" relaxations (e.g., higher LTV for certified green buildings and 0% down-payment for EV loans), supportive liquidity-buffer adjustments (PLM/PLM Syariah) to free capacity for lending, and the RPIM inclusive-financing ratio, which can be met in part through holdings of sustainable/ green instruments.	▪ System-wide climate work is advancing via scenario analysis / stress testing through Banca d'Italia's coastal flooding mortgage-portfolio scenario (Rimini) quantifies losses under alternative adaptation paths	▪ Second scenario analysis conducted by the Financial Services Agency (FSA) and Bank of Japan (BoJ) using an extended analytical framework.	▪ No measures yet

G20 PROGRESS IN BANKING SUPERVISION ACROSS KEY POLICY LEVERS CONT.

	SAUDI ARABIA	SOUTH AFRICA	SOUTH KOREA	TÜRKIYE
SUPERVISORY EXPECTATIONS	▪ The focus is social responsibility obligations (e.g., programs aligned with a board-approved policy, fair-cost services, SME support, financial awareness). There's no explicit climate/nature supervisory framework	▪ Climate	▪ Climate	▪ Climate
MATERIALITY SCOPE	▪ Not supervisory expectation yet	▪ Financial materiality	▪ Financial materiality	▪ Financial materiality
TARGET SETTING AND TRANSITION PLANNING	▪ No requirement	▪ No mandate for "science-based" targets or compulsory transition plans. G3-2024 sets disclosure expectations (TCFD/ISSB-style governance, strategy, risk, metrics/targets, scenario analysis) rather than prescribing specific target levels.	▪ The framework does not mandate net-zero target but it requires board-level consideration of Paris-alignment and the government's Climate Risk Management Target, and expects institutions to evaluate whether their portfolios align with international agreements (e.g., Paris Agreement)	▪ No requirement
CAPITAL REQUIREMENT	▪ No adjustment to capital requirement nor ICAAP mandate to integrate C/E/S at this stage.	▪ The South African Reserve Bank (SARB) expects banks to integrate climate risk into risk management and ICAAP; supervisors may act via ordinary prudential processes if risk management is deficient (but there is no dedicated "climate capital charge	▪ No mandatory requirement for banks to integrate C/E/S considerations in their ICAAP, nor any capital requirements set.	▪ No requirement
DISCLOSURE AGAINST TAXONOMY	▪ No requirement for banks to disclose against a taxonomy.	▪ Voluntary alignment/reporting to the South African Green Finance Taxonomy (National Treasury) is encouraged	▪ No requirement for banks to disclose against a taxonomy.	▪ The Türkiye Green Taxonomy Draft Regulation (public consultation, Nov-2024) will require entities subject to Türkiye Sustainability Reporting Standards (TSRS), including all banks, to assess eligibility/alignment and report via an e-Taxonomy system (voluntary to 31 Dec 2026, mandatory from 1 Jan 2027 with verification)
MACRO-PRUDENTIAL SUPERVISION	▪ No measures yet	▪ New climate risk stress-test framework (2024): SARB conducted an inaugural Climate Risk Stress Test (CRST) for systemically important banks and published the technical report (methods & results.	▪ First top-down climate scenario analysis run jointly by Bank of Korea and the Financial Supervisory Service; launched with 15 institutions and results publicized in March 2025 showing modeled losses for 7 major banks and 7 insurers (14 FIs) under adverse scenarios.	▪ No measure

G20 PROGRESS IN BANKING SUPERVISION ACROSS KEY POLICY LEVERS CONT.

	UK	USA
SUPERVISORY EXPECTATIONS	▪ Climate	▪ in October 2025, the Federal Reserve, Federal Deposit Insurance Corporation (FDIC) and the Office of the Comptroller of the Currency (OCC) jointly rescinded the Interagency Principles for Climate-Related Financial Risk Management for Large Financial Institutions, leaving federal bank regulators without dedicated climate- or nature-risk supervisory expectations, although some state regulators (e.g. NYDFS) still maintain their own climate-risk guidance.
MATERIALITY SCOPE	▪ Financial materiality	▪ No requirement
TARGET SETTING AND TRANSITION PLANNING	▪ TCFD-style disclosures are in force for large UK companies. ▪ The Government is consulting on mandating transition-plan disclosures aligned with the Transition Plan Taskforce's disclosure framework for financial institutions including insurers (ISSB-compatible).	▪ No requirement
CAPITAL REQUIREMENT	▪ The Prudential Regulation Authority (PRA) SS3/19 and subsequent consultation (CP10/25) require firms to include material climate risks in risk management and the ICAAP, applying existing frameworks to climate.	▪ No requirement
DISCLOSURE AGAINST TAXONOMY	▪ No UK green-taxonomy disclosure requirement for banks, in July 2025 the government scrapped plans for a UK taxonomy.	▪ No requirement for banks to disclose against a green taxonomy, the U.S. has no official green taxonomy.
MACRO-PRUDENTIAL SUPERVISION	▪ The Climate Biennial Exploratory Scenario (CBES) (2021/22) established the scenario framework for banks/insurers. Bank of England's Financial Policy Committee (FPC) continues to consider embedding climate risks in stress-testing where appropriate.	▪ The Federal Reserve ran a 2023 pilot Climate Scenario Analysis (CSA) with six large banks and published aggregate results in 2024, describing how banks use scenarios to explore business-model resilience to climate financial risks.

KENYA'S GREEN TAXONOMY AND CLIMATE DISCLOSURE FRAMEWORK DEVELOPMENT SUPPORTED BY THE TECHNICAL ASSISTANCE PROGRAM

Technical assistance between regulators is a powerful accelerator of green finance across jurisdictions. The European Investment Bank (EIB)'s Greening Financial Systems technical assistance program, funded by the International Climate Initiative (IKI) on behalf of the German Federal Ministry of Economic Affairs and Climate Action (BMWK), supports central banks, supervisors and financial institutions to build climate-resilient financial systems.[1] Such support builds supervisory and analytical capacity, improves data and disclosure practices, and increases the flow of capital into sustainable activities.

Kenya, one of the countries participating in the GFS program, has issued a first-edition Kenya Green Finance Taxonomy (KGFT) and a Climate Risk Disclosure Framework for the banking sector.[2] The KGFT recognizes that Africa does not contribute significantly to global greenhouse gas emissions, yet Kenya and other African countries "have borne the brunt of the impact of climate change", leading to socio-economic consequences such as loss of livelihoods, displacement, destruction of property, and forced migration. The taxonomy provides a structured classification system to guide financial institutions towards environmentally sustainable mitigation and adaptation activities.

As an early national green finance taxonomy for the banking sector (initially applied on a voluntary basis for 18 months before becoming mandatory), Kenya's taxonomy offers a useful reference point for financial institutions, banking supervisors and central banks in the region and beyond. The taxonomy draws on international experience, including the EU Taxonomy and the South African Green Finance Taxonomy, reflecting an "adopt and adapt" approach to using established green finance standards in a Kenyan context.

The Kenya Green Finance Taxonomy is designed to support the financial sector by helping distinguish between assets with high and low greenhouse-gas emissions, guiding capital allocation, investment strategies and climate risk management. It serves as a core building block of Kenya's climate information architecture and gives financial institutions clarity and certainty in selecting green investments in line with international best practice and national priorities. More broadly, the taxonomy aims to support regulators, banks and other financial institutions in managing climate-related risks by tracking exposure to taxonomy-aligned and non-aligned activities; reduce the costs of labelling and issuing green financial instruments; unlock investment opportunities in green and climate-friendly assets; provide a reference point for regulatory and supervisory oversight; and strengthen accountability and market transparency, including by helping to prevent greenwashing. [3]

Complementing the taxonomy, the climate risk disclosure framework aims to support climate resilience and sustainability by aligning with global best practices. In particular, the Central Bank of Kenya notes that it is aligned with the IFRS Sustainability Disclosure Standard S2 and the Basel Committee on Banking Supervision (BCBS) principles. IFRS S2 itself is built on the four-pillar structure originally developed by the TCFD, so this alignment also supports convergence with TCFD-style climate risk reporting.

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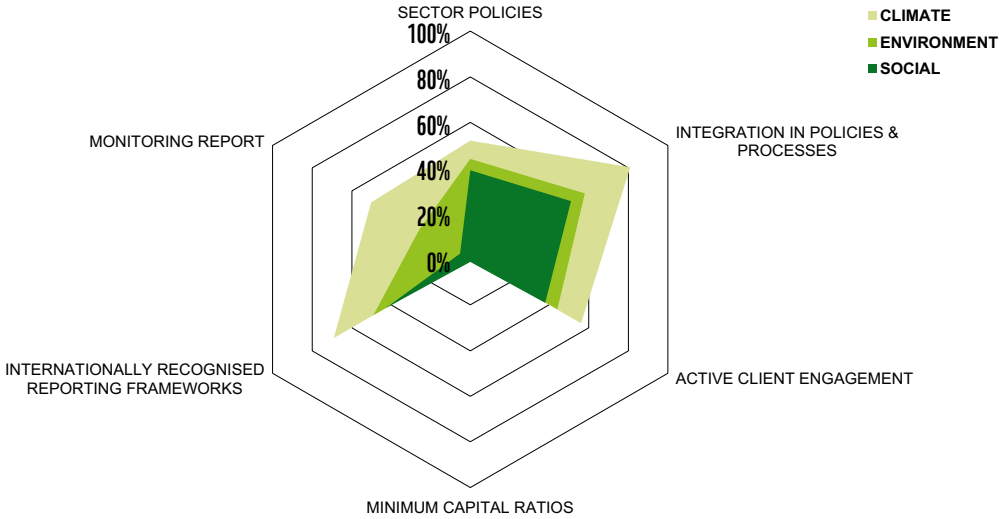
[1] European Investment Bank. (2025). Greening Financial Systems technical assistance programme.
[2] Central Bank of Kenya. (2025). Kenya Green Finance Taxonomy April 2025: Climate Risk Disclosure Framework for the Banking Sector.
[3] Central Bank of Kenya. (2025). Kenya Green Finance Taxonomy April 2025
[4] Central Bank of Kenya. (2024), Issuance of the Draft Climate Risk Disclosure Framework for the Banking Sector.

REGULATORY AND SUPERVISORY GAPS PERSIST IN SECTOR-POLICY EXPECTATIONS, CAPITAL-RATIO CALIBRATION, AND SUPERVISORY FOLLOW-THROUGH

FIGURE 3: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS OF BANKING SUPERVISION



Note: The number displayed on the graph represents the average fulfillment of indicators.
Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

***Bank Negara Malaysia (BNM)** demonstrates good supervisory monitoring by reporting how regulated entities are implementing its Climate Risk Management and Scenario Analysis (CRMSA) policy issued in November 2022. In its Annual Report 2024, BNM notes steady progress across the industry: among 66 financial groups, 83% have set climate targets (rising in count from 48 in 2023 to 55 in 2024); 95% have included climate risks in their Risk Appetite Statements; and 83% have developed sustainability strategies and frameworks (increasing from 58 in 2023 to 62 in 2024). These metrics demonstrate ongoing supervision and active follow-through by BNM as a supervisor.*

MICRO-PRUDENTIAL SUPERVISION, DISCLOSURES, AND ENFORCEMENT MECHANISM

With growing global recognition of the need to embed sustainability into strategies, business models, and risk management, the integration of climate and environmental considerations into banks' policies and processes has become a core supervisory expectation. In our 2025 sample, 80% of assessed jurisdictions have incorporated climate-related expectations into their supervisory frameworks, and around 50% have extended these to cover all three dimensions (climate, environment, and social.) This reflects broad uptake of foundational governance, strategy, and risk-management requirements by financial regulators.

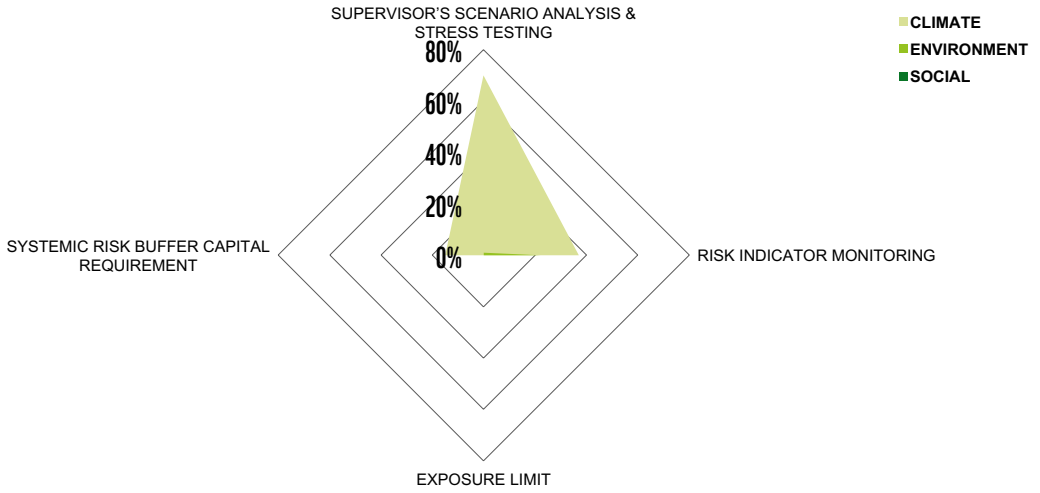
By contrast, systematic calibration of capital requirements remains rare. So far, there are no Pillar 1 calibrations and only selective, case-by-case use of Pillar 2 measures to reflect climate and environmental risks. Low alignment likely reflects ongoing challenges with data availability, risk-weight methodologies, and model-validation standards needed to quantify these risks robustly. Some pilots exist, for example, Hungary's preferential Pillar 2 treatment for certain green exposures, and the Reserve Bank of New Zealand's prudential capital treatment to improve access to finance for Māori communities. However, these initiatives function more as capital discounts than as risk-based integrations or capital charges reflecting underlying climate and nature risks.

About half of banking supervisors have published reports on banks' progress in meeting climate-related supervisory expectations, though fewer do so for environmental and social factors. These publications could be strengthened by pairing them with clear remedial timelines and, where gaps persist, proportionate Pillar 2 measures, ensuring that transparency leads to tangible improvements. A similar pattern appears in expectations for banks to adopt sector policies for high-risk or high-impact industries. Supervisors could enhance effectiveness by requiring board-approved sector standards, clear client-engagement or exit criteria, and standardized covenant templates for high-risk sectors.

In contrast, expectations for banks to align their public disclosures with internationally recognized sustainability reporting frameworks show relatively strong uptake across climate, environment, and social areas. This is largely driven by consistent supervisory references to frameworks such as the TCFD and the ISSB standards.

MACROPRUDENTIAL TOOLS SUCH AS SYSTEMIC RISK BUFFERS AND EXPOSURE LIMITS ARE RARELY ACTIVATED ACROSS THE ASSESSED COUNTRIES

FIGURE 4: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS OF BANKING SUPERVISION



Note: The number displayed on the graph represents the average fulfillment of indicators.
Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

***Banka Slovenije's risk and resilience dashboard integrates traditional systemic risk measures with climate indicators to monitor stability**. It combines quantitative and qualitative indicators and provides forward-looking signals via a color code (assessment up to one quarter ahead) and arrows showing expected direction over the following year. Climate risks include transition and physical risk metrics such as weighted carbon intensity of the banking system, portfolio tilt to polluting sectors, the share and growth of exposures to climate-sensitive sectors, and portfolio shares linked to municipalities with high or elevated physical risk (including drought, wind, extreme heat and floods). The dashboard is presented in the Financial Stability Review and used to assess systemic risks and resilience.*

MACRO-PRUDENTIAL SUPERVISION

Macroprudential measures remain relatively underdeveloped across the assessed countries, as shown in Figure 4, with low achievement across most indicators. These tools are an essential part of the supervisory ecosystem. They help identify key risks and stressors facing the financial system and provide mechanisms to manage and mitigate them, including risks that could become systemic and threaten overall stability and resilience. Macroprudential measures include capital buffers (such as the Systemic Risk Buffer (SyRB) and Countercyclical Capital Buffer (CCyB)), sectoral capital requirements, borrower-based tools, exposure or concentration limits, and system-wide stress testing.

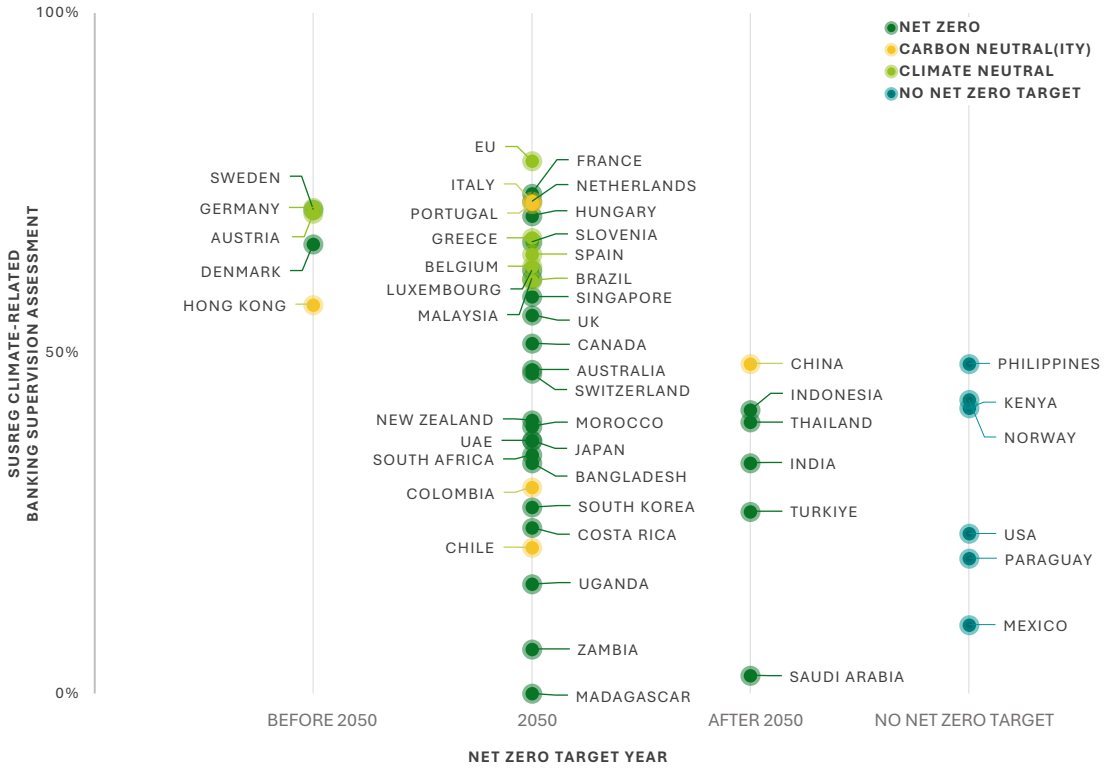
The lowest fulfilment is recorded in the area of prudential rules that limit banks' exposures to certain activities and aim to prevent systemic risks, with only around 3% achievement across climate, environmental, and social dimensions. Such measures can reduce the likelihood of significant losses and strengthen overall financial stability. However, in many jurisdictions, hard exposure caps require explicit legal authority and cross-border reciprocity. More proportionate alternatives include concentration limits, targeted risk-weight add-ons, or supervisory expectations integrated into the Supervisory Review and Evaluation Process (SREP).

Similarly, capital buffers for systemic sustainability risks can help protect against correlated losses and strengthen financial stability. Uptake remains limited, only around 15% of assessed jurisdictions have moved in this direction, largely driven by the Capital Requirements Directive VI framework. The EU's CRD VI now enables (but does not require) authorities to apply the systemic risk buffer (SyRB) to sets or subsets of exposures facing physical or transition climate risks, where such use is effective and proportionate. Where applied, these buffers should be grounded in clear evidence, adjusted as conditions evolve, and coordinated with other measures such as tighter limits on higher-risk exposures.

More than half of supervisors worldwide have now conducted system-wide climate scenarios or stress tests. Coverage of broader environmental and social factors in the analysis, however, remains limited due to data, methodological, and modelling gaps. A pragmatic next step would be to publish a small set of transparent "watch" indicators to guide supervisory dialogue with banks and signal where risks are becoming concentrated and beginning to materialize.

AMONG 29 JURISDICTIONS WITH NET-ZERO OR COMPARABLE TARGETS, 18 HAVE YET TO IMPLEMENT ADEQUATE CLIMATE POLICIES IN THEIR BANKING SECTORS

FIGURE 5: CLIMATE-RELATED BANKING SUPERVISION ASSESSMENT & NET ZERO COMMITMENT



Source of countries' net zero target: Net Zero Tracker (2024) and internal verification conducted by the authors.
Note: Although Norway has not formally adopted a net-zero target, the country has established a goal to reduce its greenhouse gas emissions by 90 to 95 percent by the year 2050, compared to emission levels in the reference year 1990.
Please also note that the US assessment shown here is based on the 31 July cutoff, before the climate guidance was rescinded, as the Federal Reserve, FDIC, and OCC later withdrew these interagency guidance on 16 October 2025.

Despite recent roll-backs and delays in global climate policies, many countries remain committed to achieving net-zero targets. Additionally, more financial institutions are setting their own net-zero targets and integrating climate considerations into their strategies.[1] In practice, larger banks are often influenced by regulatory pressures and stakeholder expectations.[2]

Central banks and supervisors do not set national climate targets but play a critical role in embedding climate-related risks into financial regulations to ensure the financial system contributes to the national target set by the government. By setting proportionate expectations for credible transition plans, linking them to Internal Capital Adequacy Assessment Process (ICAAP), the Internal Liquidity Adequacy Assessment Process (ILAAP), risk appetite, and using the Supervisory Review and Evaluation Process (SREP) to drive remediation, their promotion of climate considerations within banking supervision can encourage robust implementation.

The Net-Zero Banking Alliance (NZBA) ceased operations in October 2025, its membership model ended, although its target-setting guidance remains publicly available. This development adds further reason to emphasize verifiable, regulator-aligned transition plans and public disclosures as evidence of progress, rather than reliance on alliance affiliation.[3]

A closer look at the latest SUSREG assessment reveals that significant opportunities for improvement persist. Of the 29 countries committed to achieving net-zero, 18 have yet to implement adequate climate policies within their banking sectors, as evidenced by climate scores below 50%. This indicates that over 60% of these countries still lack proper integration of climate-related financial regulations.

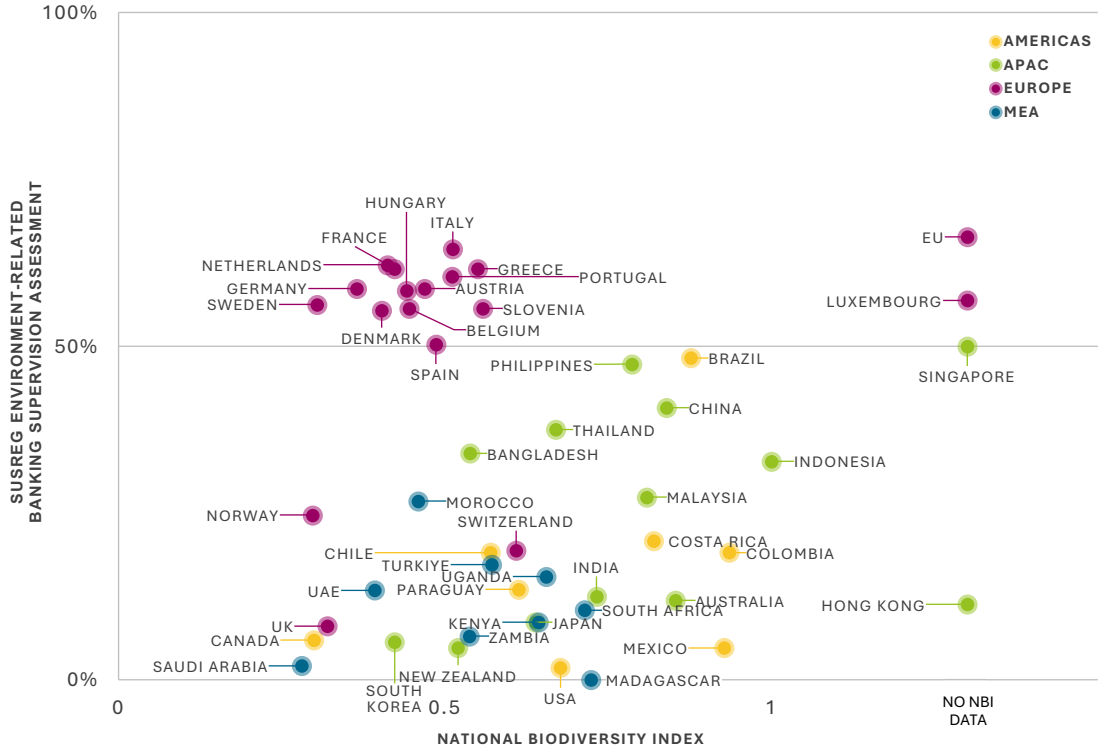
Despite recent regulatory developments such as the Omnibus proposal, EU member states continue to strengthen their climate banking supervision. While the Omnibus changes may narrow scope and defer timelines for some firms within scope, reducing the number of financial institutions covered by Corporate Sustainability Reporting Directive (CSRD) obligations and potentially weakening the availability of corporate sustainability data that the financial system relies on, core prudential expectations remain intact

HKMA's Sustainable Finance Action Agenda (Oct 2024) states that all banks should, in accordance with science-based pathways, strive to achieve net zero in their own operations by 2030 and in their financed emissions by 2050 *with a view to supporting their clients and wider economy in the net zero transition. In addition, tentatively from 2030, banks should make available their transition plans to the HKMA on a "comply or explain" basis. The transition plans should consist of decarbonization and financing targets, and clear action plans for achieving 2050 net zero ambition, including a plan for managed phase-out of financing for carbon-intensive assets. The transition plans should be Paris-aligned, robust, actionable, and up-to-date.*

[1] European Central Bank. (2023). An examination of net-zero commitments by the world's largest banks.
[2] Harvard Law School Forum on Corporate Governance. (2025). Current Trends in Scope 3 Disclosure Rates.
[3] The Guardian. (2025). Banking industry's net zero alliance shuts down amid faltering climate commitments.

NATURE-RISK SUPERVISION REMAINS WEAK, WITH 34 OF 50 JURISDICTIONS FALLING BELOW 50% ALIGNMENT WITH SUSREG ENVIRONMENTAL CRITERIA

FIGURE 6: ENVIRONMENT-RELATED BANKING SUPERVISION ASSESSMENT & NATIONAL BIODIVERSITY INDEX



Source of National Biodiversity Index: Convention on Biological Diversity (CBD).
Note: The National Biodiversity Index (NBI) is based on estimates of country richness and endemism in four terrestrial vertebrate classes and vascular plants; vertebrates and plants are ranked equally; index values range between 1.000 (maximum: Indonesia) and 0.000 (minimum: Greenland, not shown in table). The NBI includes some adjustment allowing for country size.

[1] Network for Greening the Financial System. (2023). Nature-related Financial Risks: a Conceptual Framework to guide Action by Central Banks and Supervisors.
[2] Taskforce on Nature-related Financial Disclosures. (2025). TNFD 2025 Status Report.
[3] European Central Bank. (2023). Living in a world of disappearing nature: Physical risk and the implications for financial stability (Occasional Paper No. 333).

With climate supervision maturing, regulators are beginning to widen the scope to nature-related risks, consistent with the NGFS's framing of nature as the overarching system of which climate is a component, and a call to integrate climate and broader nature risks rather than treat them in isolation.[1]

A recent Taskforce on Nature-related Financial Disclosures (TNFD) 2025 Status Report survey finds 63% of respondents (28% financial institutions) view nature-related risks as equally or more important than climate risks to future financial prospects, while more than 500 organizations have now publicly committed to align disclosures with TNFD, evidence that market practice is moving.[2]

At the same time, nature risk exposure is material for banks: European Central Bank (ECB) analysis indicates that roughly three-quarters of euro-area banks' corporate loans are to firms highly dependent on at least one ecosystem service, creating clear transmission channels to credit, operational and collateral risks.[3]

Yet banking supervision on nature still lags. In our 2025 SUSREG assessment, 34 of 50 jurisdictions score below 50% of environmental criteria, reflecting gaps in governance, location-based data, sector policies and macroprudential treatment. The current regulatory framework is failing to protect the very natural systems upon which global financial stability depends, a clear market and supervisory failure.

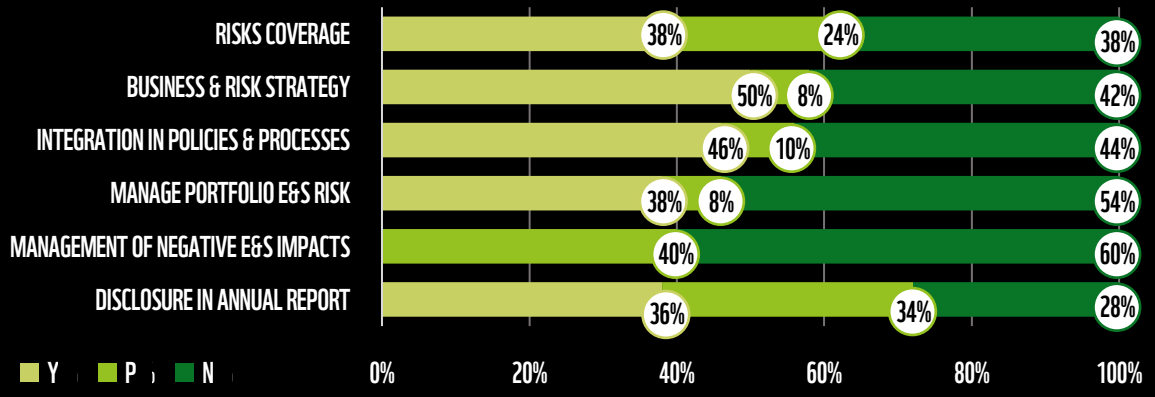
The next step is not to invent a new framework but to mainstream what firms are already beginning to adopt. Supervisors can set proportionate expectations that banks use TNFD's LEAP (locate, evaluate, assess, prepare) to identify material nature exposures, align disclosures to interoperable frameworks, and show how findings feed risks management, pricing and collateral, turning analysis into decisions without adding unnecessary bureaucracy.

Against this backdrop, WWF has expanded SUSREG with a cross-cutting thematic lens on deforestation, freshwater, and ocean health across banking and insurance. The imperative now is to move from general references to "environmental risk" toward proportionate, actionable expectations, such as location-based exposure metrics, sector standards for high-impact activities, and pilot extensions of climate scenarios to incorporate nature. The detailed insights on nature-related risk assessments are presented in the final chapter of this report.

***The Hungarian Central Bank (MNB)'s Recommendation No 9/2024 (IX.24.) sets expectations for using a minimum ESG questionnaire in underwriting and credit risk management for new corporate lending**. Institutions should raise the Annex 1 questions, collect and evaluate responses in a database, and (after a two-year qualitative phase) develop criteria for scoring, weighting and numerical assessment, integrating results into rating and assessment processes. The topics to be covered include, among others, "sustainable use and protection of water resources", "pollution prevention and control", and "protecting and restoring biodiversity and ecosystems", alongside social and governance areas. Although the instrument is not legally binding on supervised financial institutions, the MNB will monitor and assess compliance, with application beginning on 1 January 2025 and phased thresholds running through 2028..*

SOCIAL-RISK SUPERVISION REMAINS UNDERDEVELOPED, WITH NO ROBUST FRAMEWORK FOR ASSESSING HOW SOCIAL RISKS TRANSLATE INTO FINANCIAL AND SYSTEMIC RISK

FIGURE 7: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT SOCIAL-RELATED BANKING SUPERVISION INDICATORS



Note: The numbers displayed in the graph represent the percentage of countries in the SUSREG scope that do not meet (N), partially meet (P), and fully meet (Y) the SUSREG criteria on the respective indicators.

***Mexico pioneered the first sustainable finance taxonomy to make gender equality a priority objective**. It is structured around three pillars; decent work, well-being, and social inclusion, and defines "substantial contribution" at the organization level rather than the activity level. To assess contribution, the taxonomy introduces a Gender Equality Index that functions as a questionnaire with a scoring system, generating quantitative results for each pillar. An organization must meet score thresholds both overall and within each pillar to be deemed as making a substantial contribution to gender equality. In addition, it must satisfy the taxonomy's cross-cutting criteria: do no significant harm (DNSH) to environmental objectives and minimum social safeguards (e.g., human rights, labor, governance). This ensures that progressing gender equality does not undermine other taxonomy objectives.*

Compared to climate and environmental risks, which have now been embedded in most supervisory frameworks and reporting requirements, the inclusion of social risks in banking supervision remains underdeveloped and largely qualitative. These risks, ranging from labor and human-rights issues, to community impacts and access to finance, are often mentioned in general terms but rarely supported by concrete metrics, taxonomies, or supervisory methodologies. Unlike climate risk, where established frameworks exist for quantification (e.g., GHG accounting, scenario analysis), there is still no robust framework for assessing how social factors translate into financial soundness or systemic risk.

This gap creates major challenges for both supervisors and financial institutions. Social risks are often covered superficially in policies or disclosures, without meaningful integration into strategy, portfolio management, capital planning, or internal risk appetite. As shown in Figure 8, indicators for social risk management show a higher share of "partial" achievement. For example, the China Banking and Insurance Regulatory Commission (CBIRC) mentions social issues within its Green Credit and Finance Guidelines, but the guideline primarily emphasizes on environmental and climate-related factors.

Across jurisdictions, most of the progress on social issues has occurred at the policy and strategy level, with more than half requiring banks to integrate social risks. By contrast, far fewer jurisdictions require banks to assess and manage the social impacts created through their financing and client relationships. This includes potential adverse effects on labor rights, land and community rights. Where supervision does address these channels, it is often through indirect mechanisms, such as conduct-of-business rules, anti-discrimination frameworks, or voluntary adherence to international standards like the UN Guiding Principles on Business and Human Rights or the OECD Guidelines for Multinational Enterprises. Authorities have yet to connect these expectations to prudential tools such as internal capital assessment, credit-risk modelling, or collateral valuation.

However, a few jurisdictions are beginning to advance more tangible approaches. The Reserve Bank of New Zealand has focused on financial inclusion and equitable access to finance particularly for Māori communities, reflecting growing recognition that social equity and inclusion are an integral part of systemic financial resilience (this will be explored in more detail on the next page).

Going forward, central banks and supervisors could define and classify material social risk channels relevant to financial stability (e.g., labor rights, access to finance for marginal communities, community displacement, consumer protection). Supervisors could also integrate social risk indicators into the Supervisory Review and Evaluation Process (SREP), stress testing, and Pillar 3 disclosures.

Developing these supervisory tools would enable regulators to move beyond high level commitments toward a more risk-based, measurable, and proportionate framework. One that anchors financial inclusion and social resilience as core components of prudential supervision.

CALIBRATING PRUDENTIAL RULES FOR INDIGENOUS COMMUNITIES: THE RESERVE BANK OF NEW ZEALAND'S APPROACH TO MAORI ACCESS TO FINANCE

Reserve Bank of New Zealand
Te Pūtea Matua

The Reserve Bank of New Zealand (RBNZ) has undertaken dedicated work on Māori access to capital alongside its prudential responsibilities. In 2022, it published the paper Improving "Māori Access to Capital"[1], which explains that this work "pulls together and combines quantitative analysis using data on individual firms, with qualitative insights gained from extensive stakeholder engagement" with Māori entities, financial institutions and government agencies. The paper highlights that Māori businesses face higher funding costs on average and identifies barriers including challenges in borrowing against communally-held whenua Māori, a shortage of data on Māori businesses and the Māori economy, and gaps in market scale, coordination and expertise. It notes that these barriers can undermine the efficiency of capital allocation in the financial system and, by limiting Māori access to capital, may constrain New Zealand's overall economic potential.

In parallel, RBNZ has calibrated capital requirements to reflect the reduced credit risk to lenders where public guarantees demonstrably change credit risk, including loans underwritten by Kāinga Ora. Following the Risk Weights Omnibus consultation concluded in 2023[2], the RBNZ confirmed a reduced 20% risk weight for First Home Loans underwritten by Kāinga Ora and extended the same treatment to Kāinga Whenua loans, which finance housing on Māori land and are likewise supported by a Kāinga Ora guarantee.

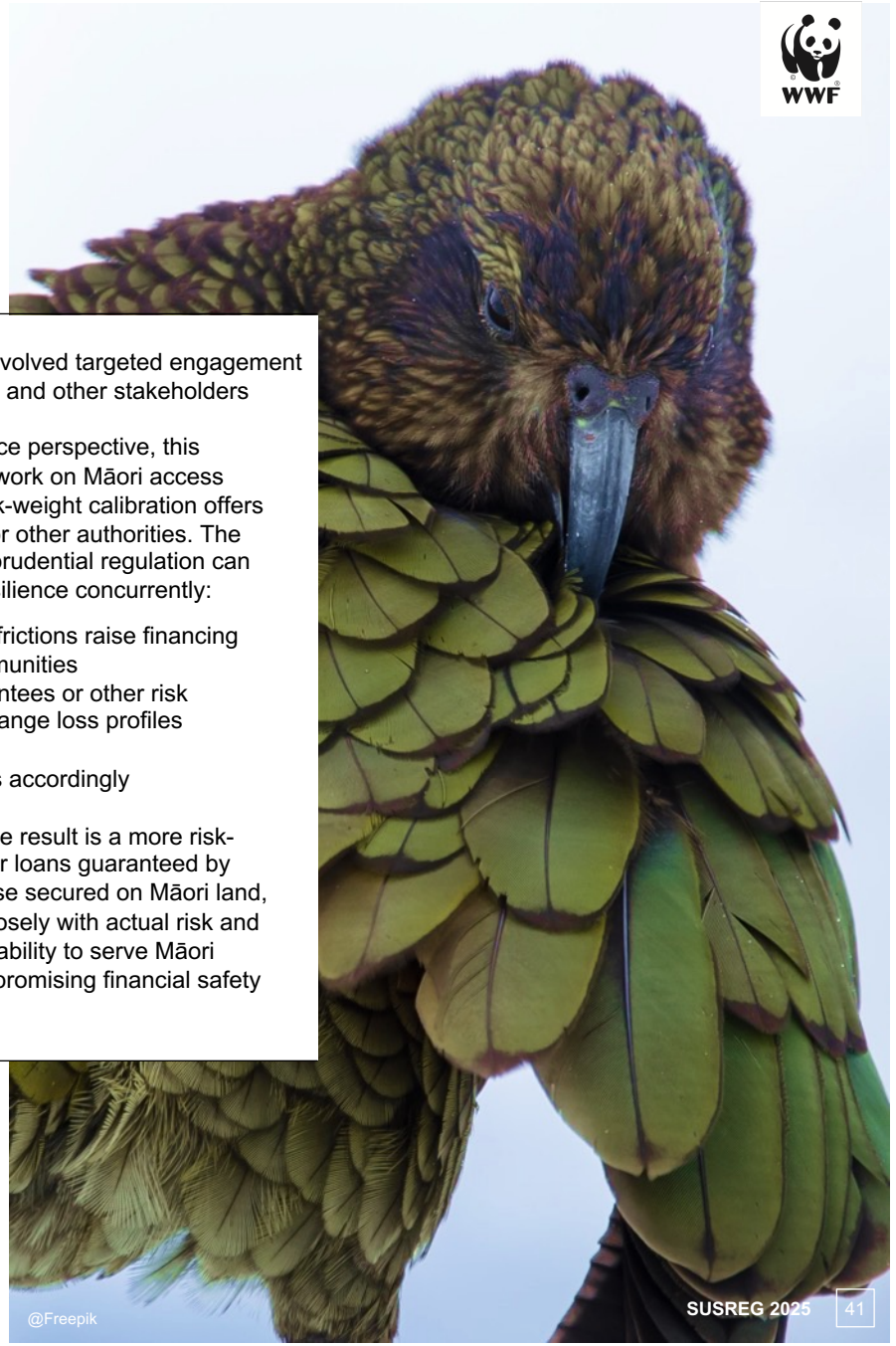
The consultation also resulted in explicit provisions for Kāinga Whenua lending, described as a loan that allows Māori to build, purchase or relocate a house on multiple-owned Māori land.[3] The adjustment is grounded in standard prudential logic, as the Kāinga Ora guarantee significantly reduces expected loss and so justifies a lower risk weight, and indirectly, it may help ease some of the long-standing barriers to mortgage finance on Māori land.

The whole process is a notable example for other financial regulators and supervisors. The Bank set out the problem, consulted publicly through its Risk Weights Omnibus process, and published its response and final decisions with effective dates and implementation detail. In parallel, its "Improving Māori Access to Capital" work involved targeted engagement with Māori capital seekers and other stakeholders

From a supervisory-practice perspective, this combination of analytical work on Māori access to capital and targeted risk-weight calibration offers a useful reference point for other authorities. The approach illustrates how prudential regulation can advance inclusion and resilience concurrently:

- Identify where market frictions raise financing costs for specific communities
- Assess whether guarantees or other risk mitigants materially change loss profiles
- Consult on options
- Calibrate requirements accordingly

In New Zealand's case, the result is a more risk-sensitive capital regime for loans guaranteed by Kāinga Ora, including those secured on Māori land, that aligns capital more closely with actual risk and strengthens the system's ability to serve Māori communities without compromising financial safety and soundness.



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[1] Reserve Bank of New Zealand. (2022). Improving Māori Access to Capital: Issues Paper.
[2] Reserve Bank of New Zealand. (2023). Risk Weights Omnibus Consultation: Response to Submissions on Exposure Drafts.
[3] Kāinga Ora. (2025). Kāinga Whenua.

CENTRAL BANKING

EXECUTIVE SUMMARY OF THE 2025 CENTRAL BANKING ASSESSMENT

NOTABLE DEVELOPMENTS IN 2025

This section explores how central banks can respond to climate, environmental, and social risks in a manner consistent with their fundamental responsibilities of maintaining monetary stability and controlling the money supply. It considers the range of actions central banks can take to strengthen financial system resilience, highlighting their proactive efforts to understand these risks and their implications for core central banking functions.

Recent developments among central banks worldwide demonstrate a varying degree of climate and environmental risks integration into their operations:

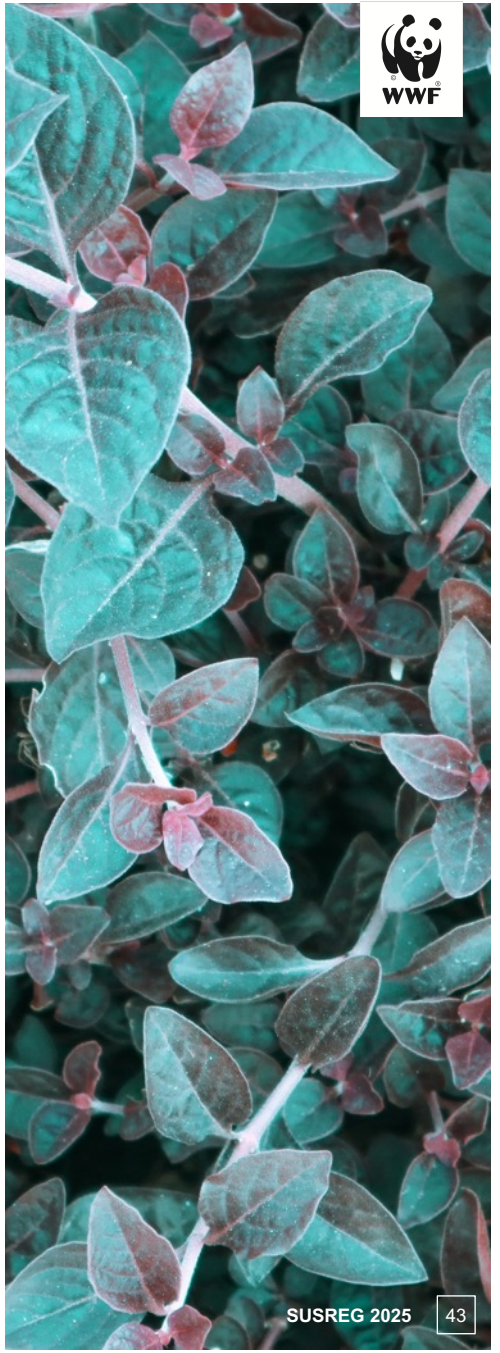
- In January 2025 the US Federal Reserve (FED) formally withdrew from the Network for Greening the Financial System (NGFS), citing mandate constraints. The move reduces US participation in coordinated supervisory work on climate risk.
- The Hungarian Central Bank (Magyar Nemzeti Bank, MNB) has expanded its climate-related financial disclosure framework, effective May 2025, by explicitly including ecosystem and biodiversity risks. Recognizing the interconnected nature of climate change, biodiversity loss, and ecosystem degradation, the MNB uses the WWF Risk Filter Suite to assess nature-related risks within its foreign exchange reserves and monetary policy portfolios.
- The European Central Bank (ECB) introduced a forward-looking “climate factor” in the Eurosystem collateral framework, an additional valuation discount applied after standard haircuts that lowers the eligible value of collateral with higher transition risk exposure. It also complemented its climate-related financial disclosures by introducing a new nature-loss indicator applied to its assets in both monetary-policy and non-monetary portfolios.
- As of 2025, the Eurosystem is no longer reinvesting in corporate-sector securities: reinvestments under the Asset Purchase Programme (including the Corporate Sector Purchase Programme) ended in July 2023, and reinvestments under the Pandemic Emergency Purchase Programme fully ceased at the end of 2024. Notably, in earlier years the European Central Bank “greened” the Asset Purchase Programme’s corporate portfolio by tilting reinvestments toward better climate performers.
- Outside the EU, adjustments to collateral frameworks and monetary-policy tools for climate and nature risk have been minimal.

Collectively, the cases point to a global trend of evolving central-bank approaches to climate, nature and sustainability, some advancing, others pausing or reversing, alongside the ongoing need to safeguard monetary and financial stability.

WHAT TO EXPECT IN THIS SECTION?

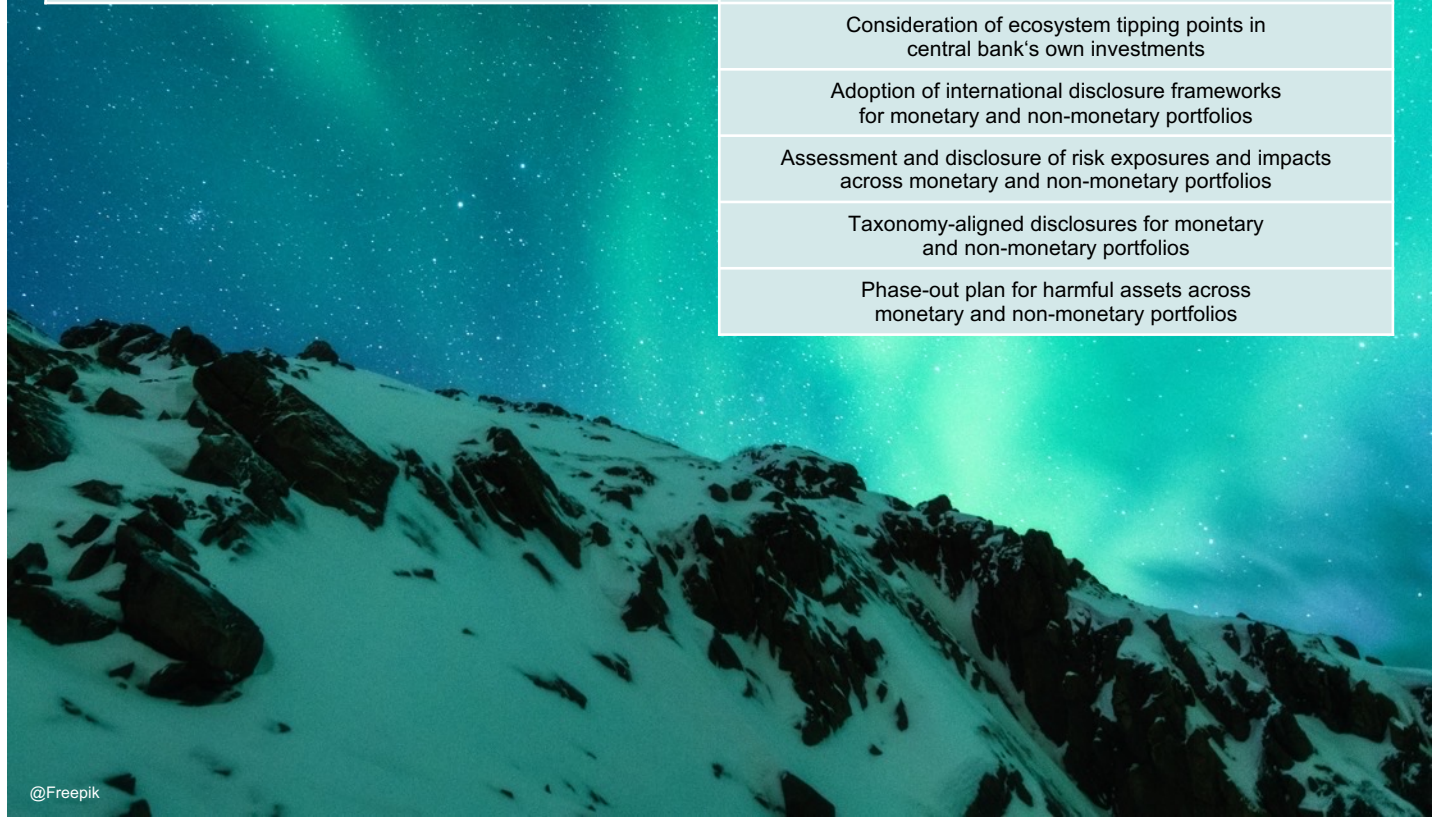
This section assesses the maturity and effectiveness of central-bank measures to address climate, environmental, and social (CES) risks. It considers both policy signals across monetary instruments and broader central-bank leadership. We map progress across indicator tiers (Basic, Intermediate, Advanced), summarize measures in G20 jurisdictions, and analyze indicators covering monetary policy and institutional leadership (strategy setting, disclosure, the management of own-account portfolios, etc). We also benchmark climate- and nature-related central-bank measures against balance-sheet size to test whether the largest institutions are integrating these considerations proportionately with their scale.

To illustrate application, we highlight good practices, including the European Central Bank’s integration of a climate factor into its collateral framework as well as its nature related disclosure in its portfolio and the Hungarian Central Bank’s use of the WWF Risk Filter Suite to assess nature-related risks and impacts in its portfolios.



CENTRAL BANKING INDICATORS

CENTRAL BANKING ACTIVITIES	
2.1	2.2
MONETARY POLICY	**LEADERSHIP & INTERNAL ORGANISATION**
Corporate asset purchase programs	NGFS membership for central banks
Collateral framework	Nominal anchors
Foreign exchange reserves	Central bank's E&S strategy
Subsidised & targeted refinancing loans	Internal organisation & resources of the central bank
Reserve requirements	Asset management of its own portfolio
	Consideration of ecosystem tipping points in central bank's own investments
	Adoption of international disclosure frameworks for monetary and non-monetary portfolios
	Assessment and disclosure of risk exposures and impacts across monetary and non-monetary portfolios
	Taxonomy-aligned disclosures for monetary and non-monetary portfolios
	Phase-out plan for harmful assets across monetary and non-monetary portfolios



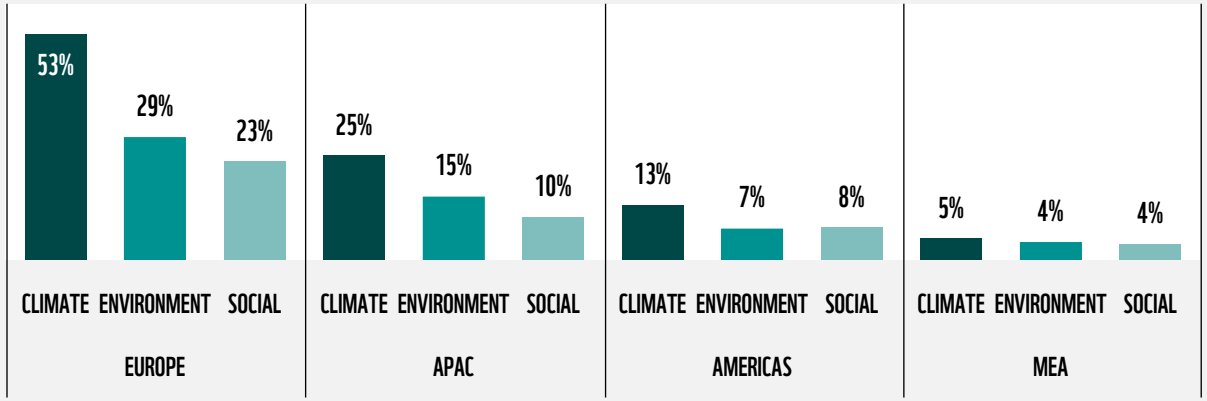
***Sveriges Riksbank's Climate Report 2025 clarifies that its foreign currency reserves shall consist only of bonds issued by countries that have joined the Paris Agreement**, continuing prior practice. An explicit exception applies to the United States: because the US dollar is essential for preparedness and for maintaining price and financial stability, the Riksbank will continue to hold US government bonds in its FX reserve. For sub-sovereigns, the Riksbank invests only in bonds from Australian states and Canadian provinces whose carbon footprint is at or below their national average, measured as portfolio weighted-average carbon intensity. From 2025, emissions reporting expands beyond production-based metrics to include land use, land-use change and forestry (LULUCF).*

***The People's Bank of China announced in August 2024 that it will extend the Carbon Emissions Reduction Facility (CERF) to end-2027**, keeping a targeted refinancing window that provides banks with up to 60% of the principal of qualifying carbon-reduction loans at about 1.75% (one-year rate). The tool steers credit to clean energy, energy efficiency, environmental protection and carbon-reduction technologies, with access available to nationwide licensed institutions. To safeguard impact, the PBoC requires banks to disclose information on carbon-reduction lending and the amount of emission reduction supported, and that this information is verified by third-party institutions and subject to public scrutiny.*

***The Bank of Canada's 2024 climate disclosure (June 2025)** strengthens how it measures and communicates climate risk across policy and operations. The Bank refines models and adds business/consumer survey questions to trace climate's effects on inflation and growth, improving macro analysis and decision support. Operationally, it aligns with the federal Greening Government Strategy and its set of commitments, including the commitment to achieve net-zero emissions by 2050 and enhance climate resilience. Consistent with that strategy, the Bank publishes information on its commitments, including its greenhouse gas emissions footprint in its significant areas of operations. It also adopts the Task Force on Climate-related Financial Disclosures (TCFD) standards as part of its corporate reporting.*

PROGRESS IN ADJUSTING CENTRAL BANKING OPERATIONS HAS BEEN STAGNANT OVER THE YEARS, DESPITE THE SIGNIFICANT SIZE OF CENTRAL BANKS' BALANCE SHEETS

FIGURE 8: AVERAGE FULFILMENT OF SUSREG CENTRAL BANKING INDICATORS BY TOPIC AND REGION IN 2025



The Eurosystem's corporate bond reinvestments were "tilted" toward better climate performers using an European Central Bank (ECB) climate score *combining lower historical emissions, credible forward-looking targets, and quality of climate disclosures. The aim was to gradually decarbonise holdings while keeping purchase volumes driven by monetary-policy needs, with the option to restrict the worst performers. However, the Eurosystem no longer conducts purchases or reinvestments of corporate bonds under either the Asset Purchase Program (APP) or Pandemic Emergency Purchase Program (PEPP). The APP reinvestments ended in July 2023 and PEPP reinvestments were fully discontinued at end-2024. Therefore, the tilting mechanism is no longer active for new flows. Climate integration continues via other tools (e.g., collateral framework climate factor).*

Note: Following methodological consultation, we reweighted indicators. As a result, scores may decline without underlying changes in the policy and strategy of the central banks, hence, we do not present prior-year comparisons unless restated on the 2025 basis.

CLIMATE

Across regions, sustainability shows up most visibly in central bank leadership statements and supervisory work, while adjustments to monetary policy operations are emerging but still selective. A few authorities are now embedding climate risk into operational toolkits, for example, through introducing climate-risk haircuts in collateral frameworks, primarily to protect balance sheets and implementation resilience rather than to steer credit.

Where legal footing and data allow, we see measured adjustments such as calibrated collateral "climate factors", integrating climate into in-house credit assessments, and portfolio temperature-alignment targets for own-account investments. For instance, Banque de France has committed to align its corporate bond holdings with a 1.5°C trajectory by end-2026, building on its equity portfolio, which is already aligned with a <1.5°C trajectory.

ENVIRONMENT

Nature-related risks have scarcely entered monetary operations. Where tools have shifted, measures remain climate-specific, from the ECB's planned collateral 'climate factor' to targeted lending in several central banks in APAC. So far, biodiversity-related metrics have not been specifically built into central bank collateral frameworks (including haircuts) or asset purchase programmes. Instead, biodiversity is reflected as part of general environmental criteria or through investments in sustainable or green bond portfolios.

That said, central bank portfolio disclosures are inching forward on nature. The ECB now discloses a nature-loss exposure indicator for Eurosystem and ECB corporate portfolios, Banque de France has expanded reporting on the nature impact/exposure of its portfolio, DNB piloted TNFD LEAP approach on its own-account investments, and MNB discloses nature-related risks and impacts of its foreign exchange reserves and monetary policy portfolios using the WWF Risk Filter Suite.

SOCIAL

Social topics remain weakly reflected in monetary operations. Most observable progress on 'S' comes via SRI strategies in central-bank portfolios and adding sustainable/social bonds to own-funds and reserves, rather than systemic 'S' criteria in central bank collateral frameworks (including haircuts) or asset purchase programs.

For instance, in 2024 the Eurosystem held 0.5% sustainability and 1.3% social bonds in its sovereign/sub-sovereign book. Brazil's central bank formalised sustainability in reserve management (counterparty ESG, strategic allocation to green/sustainability/social bonds). Banco de la República (Colombia) likewise established policies and procedures that favor investments aligned with ESG factors and hire external managers that have extensive experience including ESG criteria in their investment processes.

CLIMATE AND NATURE IN THE TOOLKIT: THE EUROPEAN CENTRAL BANK'S ADJUSTMENTS TO ITS COLLATERAL FRAMEWORK AND DISCLOSURE

The European Central Bank (ECB) has taken significant steps to embed sustainability considerations into its financial activities, reflecting its commitment to managing climate-related risks and supporting the green transition within its mandate.

In July 2025, the ECB approved the introduction of a "climate factor" in the Eurosystem collateral framework, applied to marketable assets issued by non-financial corporations and calibrated using sector-, entity-, and asset-level information, reducing the collateral value of assets more exposed to climate-related transition risks.[1] The factor will first apply to marketable assets of non-financial corporations and take effect in the second half of 2026, when the measure goes live in H2-2026.

The aim is to enhance the resilience of monetary-policy implementation to forward-looking transition shocks and related climate-risk-driven valuation uncertainty. In plain terms, the ECB is adding a valuation/risk-control adjustment overlay, akin to a haircut add-on that strengthens its financial stability while staying within its mandate.

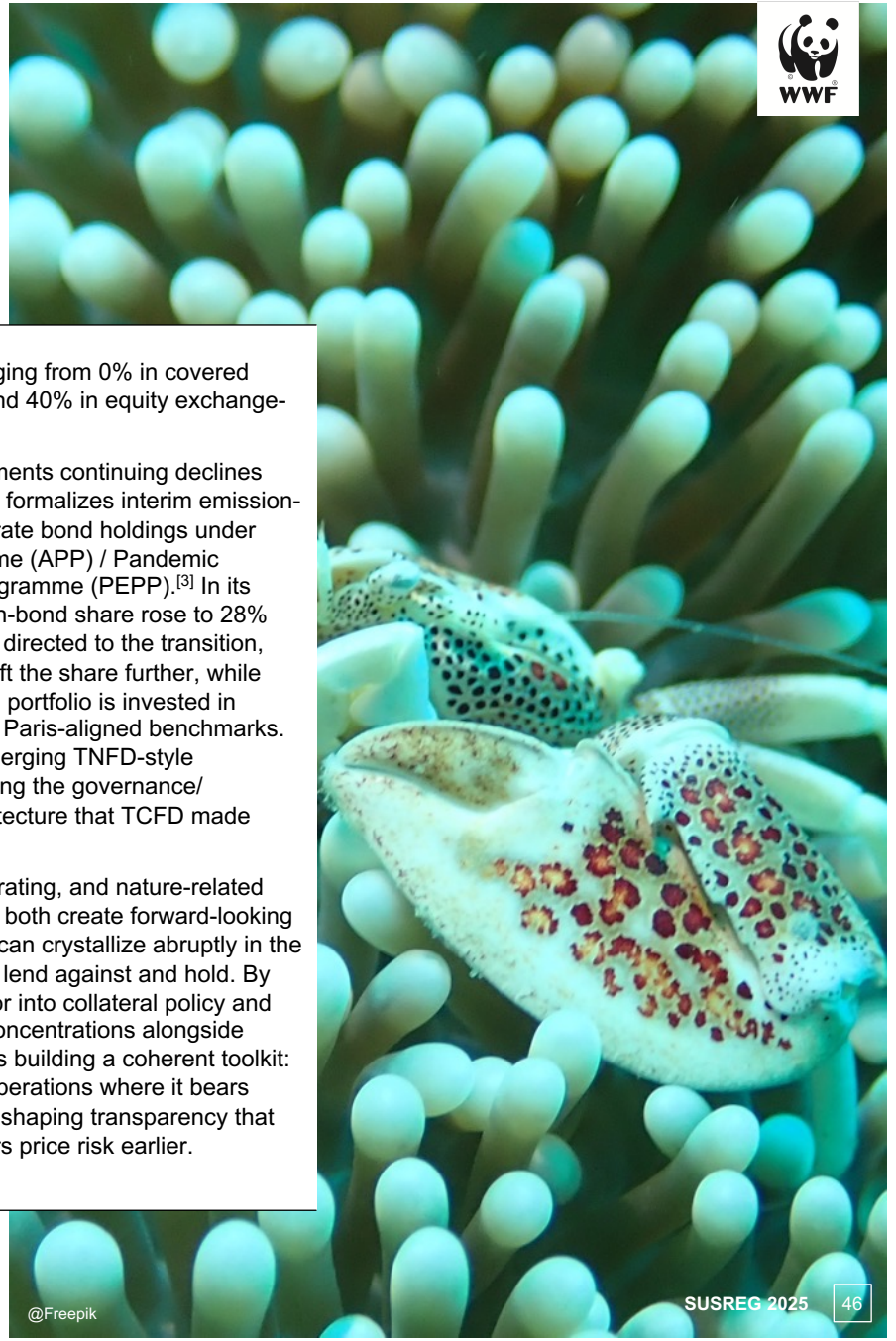
Additionally, The ECB's third climate-related disclosure (June 2025) now spans the Eurosystem's monetary-policy portfolios[2], the ECB's foreign reserves and its non-monetary policy portfolios (own funds and the staff pension fund) and crucially adds indicators of nature loss by flagging portfolio concentrations in sectors with material dependencies or impacts on ecosystems.

On the new nature indicator, the ECB uses one of the core exposure metrics recommended by the Taskforce on Nature-related Financial Disclosures (TNFD) for financial institutions, reporting the share of corporate investments in sectors with material dependencies or impacts on nature. This first iteration is presented as an initial, high-level estimate, essentially an exposure screen, rather than a measure of actual site-level impacts or dependencies. The ECB notes that this indicator is still only an initial estimate and that further work is needed to better understand nature-related risks and their potential economic and financial consequences.

The disclosure is made across portfolios and designed to sit alongside carbon metrics, not replace them. Approximately 30% of Eurosystem monetary-policy corporate bond holdings cluster in the three most nature-exposed sectors (utilities, food, and real estate). In the ECB staff pension fund, 26% of corporate bonds and 34% of equities fall into TNFD priority sectors. In the ECB's own-funds portfolio and staff pension fund, the share of corporate investments exposed to sectors that depend on or impact nature varies by asset class, ranging from 0% in covered bond investments to around 40% in equity exchange-traded funds.

The disclosure also documents continuing declines in financed emissions and formalizes interim emission-intensity targets for corporate bond holdings under Asset Purchase Programme (APP) / Pandemic Emergency Purchase Programme (PEPP).[3] In its own-funds book, the green-bond share rose to 28% in 2024, about €6.4 billion directed to the transition, with a stated intention to lift the share further, while a portion of the own-funds portfolio is invested in equity ETFs that track EU Paris-aligned benchmarks. These steps align with emerging TNFD-style practices without reinventing the governance/strategy/risk/metrics architecture that TCFD made standard.

Transition policy is accelerating, and nature-related constraints are tightening; both create forward-looking valuation uncertainty that can crystallize abruptly in the instruments central banks lend against and hold. By hard-wiring a climate factor into collateral policy and disclosing nature-linked concentrations alongside carbon metrics, the ECB is building a coherent toolkit: (i) a preventive buffer in operations where it bears credit risk; and (ii) market-shaping transparency that helps issuers and investors price risk earlier.



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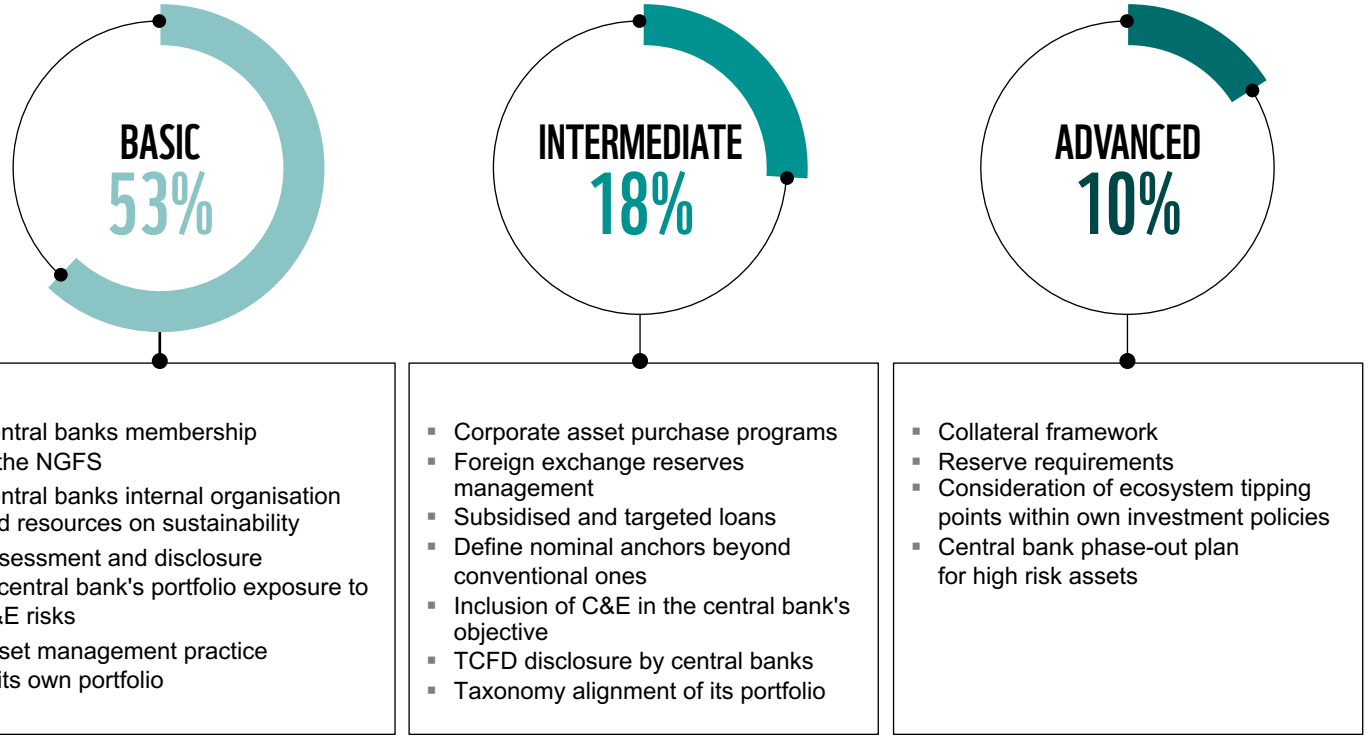
[1] European Central Bank. (2025). FAQ on the climate factor in the Eurosystem collateral framework.
[2] European Central Bank. (2025). Climate-related financial disclosures of the ECB's non-monetary policy portfolios.
[3] European Central Bank. (2025). Climate-related financial disclosures of Eurosystem assets held for monetary policy purposes and of the ECB's foreign reserves.

SLOW PROGRESS IN CENTRAL BANKING OPERATIONS, WITH ONLY 18% OF INTERMEDIATE AND 10% OF ADVANCED INDICATORS MET

FIGURE 9: AVERAGE ACHIEVEMENT OF CLIMATE AND ENVIRONMENT CENTRAL-BANKING IN JURISDICTIONS BY CATEGORY



Note: The number displayed on the graph represents the average fulfillment of indicators for the climate and environmental assessment. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

- The central banks that have been assessed have fulfilled only half of the basic indicators, with the highest fulfillment related to the integration of climate and environment consideration in the asset management practices of own portfolio. This reflects a pragmatic focus, with central banks acting as risk-aware stewards of their own portfolios.
- Fulfilment drops sharply from basic to intermediate indicators – precisely where integration requires calibrating monetary tools. Incorporation of climate and environmental risks remains limited in corporate purchase programs, targeted refinancing lines, collateral/eligibility practices, and foreign exchange (FX) reserve strategy.

  The weakest fulfillment are on disclosure of the share of monetary portfolios aligned with sustainable taxonomies which may reflect practical hurdles. This implies a sparse market supply where there simply aren't many taxonomy-aligned assets available (and often not in the sizes/currencies/maturities central banks need), so even willing buyers end up with small shares.
- For advanced indicators, the fulfillment rate is even lower, at a mere 10%. Progress remains limited on several fronts. Collateral frameworks have yet to incorporate explicit climate, nature, or social criteria beyond baseline risk controls. Reserve requirements do not reflect environmental or social factors, given their statutory nature and calibration challenges. And only a small number of central banks articulate phase-out strategies for high-risk assets.

G20 PROGRESS ON CENTRAL BANKING OPERATIONS AND LEADERSHIP

	AUSTRALIA	BRAZIL	CANADA	CHINA
CENTRAL BANK STRATEGY	▪ In its 2025 Annual Report, the Reserve Bank of Australia (RBA) has set a Net Zero Target for its own operations, created a Climate and Sustainability Committee, and is drawing an enterprise-wide climate strategy.	▪ Not a time-bound "net-zero" strategy, but sustainability is formally embedded in the BCB's Agenda. The Banco Central do Brasil (BCB) also publishes an annual Report on Social, Environmental and Climate-related Risks and Opportunities (RIS) (now in its 5th edition, Sept 2025), framing how S/E/C considerations are integrated into its mandate and work program.	▪ The Bank of Canada strategy aligns with federal Greening Government Strategy (I.e., net-zero by 2050 for operations).	▪ Green finance is embedded in policy via joint Guidelines on Financial Support for Green and Low-carbon Development (the People's Bank of China (PBoC) with other ministries/regulators) and long-running frameworks such as the Green Finance Evaluation Scheme for banks and environmental-information disclosure guidelines for Fis.
MONETARY POLICY ADJUSTMENT	▪ No dedicated collateral tilt, asset purchase program, or green Targeted Longer-Term Refinancing Operations (TLTRO).	▪ No climate-specific collateral "factor" or green refinancing facility is in force. The BCB's report notes analytical work and studies toward a 'sustainable financial liquidity line' (exploratory, not operational). ▪ Under the federal Eco Invest Brazil program (CMN 5.205/2025), the BCB would intermediate long-tenor FX-hedge derivatives via the IDB for eligible sustainability projects. These are implementation roles, not changes to collateral policy, asset purchases, or the monetary-policy stance; standard monetary policy remains unchanged.	▪ No bespoke climate/nature instruments (e.g., no "climate factor" in collateral, no green TLTRO). The Bank integrates climate considerations analytically into its outlook and models (e.g., incorporating climate policy impacts in the 2024 potential-output assessment; adding climate questions to business/consumer surveys).	▪ The PBOC's Carbon Emission Reduction Facility (CERF) provides low-cost relending that refinances up to 60% of eligible loans at 1.75% and has been extended to end-2027. ▪ In addition, since 2018, corporate green bonds have been eligible collateral for the PBoC's Medium-Term Lending Facility.
INVESTMENT OF OWN PORTFOLIO	▪ The reserve portfolio remains focused on high-quality, liquid sovereign, quasi-sovereign and supranational assets across benchmark currencies. The RBA also holds a modest allocation to the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)'s Asian Bond Fund (ABF) to support regional market development.	▪ Reserve management is based on a sound governance framework with clear decision-making structures and has incorporated sustainability criteria (e.g. in selecting counterparties for international reserves and investment management). ▪ Since 2021 the BCB has a strategic allocation to green bonds in its reference portfolio; it also invested in BIS green funds (BISIP Green USD/EUR), and it now holds green, social, and sustainability-labelled bonds issued, subject to the usual liquidity/safety constraints.	▪ Integration of mainly climate risks into asset managements of the pension plan. It reports climate metrics of assets used in operations (incl. WACI methodology) but does not apply a green tilt to these holdings.	▪ Public documentation does not confirm a formal, published ESG integration policy into its own asset management practices.
CENTRAL BANK DISCLOSURE	▪ The RBA now provides climate-related disclosures (FY2024/25) under the Commonwealth Climate Disclosure (CCD) framework covering governance, strategy, risk management, and metrics/targets for its operations. The report notes that policy-function climate disclosures are intended in subsequent years as the approach matures.	▪ Disclosure of climate-related considerations and portfolio exposures in line with TCFD and ISSB. ▪ For reserves, the BCB discloses metrics and monitoring, including CO_2e measures and a WACI-style indicator derived from country emissions data, plus charts showing the growing share of sustainable-labelled assets in reserves.	▪ The Bank discloses based on TCFD annually covering governance/strategy/risks/metrics for operations, balance sheet, and the Pension Plan, with targets for operations.	▪ The PBoC has not published TCFD/ISSB-style climate disclosures for its own balance-sheet/ reserve portfolio.

G20 PROGRESS ON CENTRAL BANKING OPERATIONS AND LEADERSHIP CONT.

	EU	FRANCE	GERMANY	INDIA
CENTRAL BANK STRATEGY	▪ The European Central Bank (ECB) has a published a sequence of plans rather than a single time-bound transition target: the 2021 climate action roadmap, a 2022 climate agenda, and the Climate and Nature Plan 2024–2025 (which dedicates a pillar to understanding nature-related risks, in addition to climate work).	▪ Banque de France (BdF) has a published responsible-investment (RI) strategy and annual Sustainability/TCFD reports setting out how climate, environmental and social topics are embedded in its missions and own-account investments.	▪ Sustainability is embedded in the Bundesbank's strategy and annual environmental/sustainability reports.	▪ No published, time-bound climate or nature transition strategy for the central bank itself.
MONETARY POLICY ADJUSTMENT	▪ In July 2025, the ECB announced a new "climate factor" that will reduce collateral valuations for assets more exposed to transition risk. ▪ As of 2025, the Eurosystem no longer reinvests in corporate-sector securities. In previous years, the ECB had "greened" its Asset Purchase Programme (APP) corporate portfolio by tilting reinvestments towards better climate performers.	▪ France applies ECB decisions as part of the Eurosystem.	▪ Germany applies ECB decisions as part of the Eurosystem.	▪ No climate or nature-specific instruments (e.g., no green refinancing line, collateral tilts, or climate factors). Climate considerations feature in analysis and research, but the operating framework remains standard.
INVESTMENT OF OWN PORTFOLIO	▪ In 2021, the Eurosystem (ECB plus euro-area National Central Banks (NCBs)) agreed a common stance for sustainable and responsible investment (SRI) in euro-denominated non-monetary policy portfolios such as own funds and staff pension funds. The stance commits members to apply climate-related SRI principles, improve the measurement of greenhouse gas emissions and other SRI metrics.	▪ BdF applies RI policies to own funds and pension portfolios and has extended RI practices to euro-denominated own portfolios and, in part, to FX reserves (including a carbon-intensity constraint in the allocation model for a share of reserves). ▪ BdF also operates fossil-fuel exclusions/phase-outs: it excludes issuers involved in new fossil-fuel extraction projects, maintains coal and unconventional hydrocarbons exclusions	▪ The Bundesbank applies a sustainable investment strategy to its euro-denominated non-monetary policy securities portfolios. It also manages foreign-currency reserves with sustainability aspects. ▪ For pension assets under Bundesbank management (e.g., the Federal Pension Reserve/Fund), investment policies emphasize climate criteria in line with federal guidelines.	▪ No public policy stating that E&S criteria are integrated into RBI's reserve management or any other own-account investment mandates
CENTRAL BANK DISCLOSURE	▪ The ECB annually publishes climate-related financial disclosures for: (i) Eurosystem assets held for monetary policy purposes and the ECB's foreign reserves, and (ii) the ECB's non-monetary policy portfolios (own funds and staff pension fund). The 2024/2025 cycle has also included a nature-related indicator in the disclosure. ▪ In 2021, the euroystem central banks agreed to start annual climate-related disclosures within two years, using TCFD as the initial reporting framework, at least for metrics and targets.	▪ BdF also publishes sustainability reports for its own-account portfolios, covering targets/metrics and expanding nature-related indicators. ▪ On biodiversity, BdF discloses impacts using the Corporate Biodiversity Footprint (CBF) methodology, which attributes portfolio-level pressures across land-use change, air pollution, water pollution, and climate change along investee value chains. ▪ On the EU Taxonomy, BdF reports eligibility and (where assessable) alignment indicators for its equity and corporate-bond holdings.	▪ The Bundesbank publishes TCFD-style climate information in its sustainability reporting. It reports portfolio exposures using external ESG data (e.g., green/brown shares of holdings based on a recognized provider's methodology) and discloses selected climate metrics and indicators for own-account portfolios.	▪ No sustainability disclosure of the central bank's monetary or non-monetary portfolio.

G20 PROGRESS ON CENTRAL BANKING OPERATIONS AND LEADERSHIP CONT.

	INDONESIA	ITALY	JAPAN	MEXICO
CENTRAL BANK STRATEGY	▪ The P2SK ((Law on Development and Strengthening of the Financial Sector) explicitly mandates Bank Indonesia to regulate and develop sustainable finance. ▪ BI references the importance of sustainable finance at a high level, but without dated, science-based targets for central-bank activities.	▪ Banca d'Italia has a formal sustainability framework (Responsible Investment Charter; annual Activity & Sustainability reporting) but no dated transition/net-zero plan or portfolio-level decarbonisation targets to date.	▪ Published Bank of Japan (BoJ)'s Strategy on Climate Change (July 2021) and maintains a Climate Coordination Hub. This is a policy framework rather than a dated, science-based transition plan for the Bank's own operations/portfolios.	▪ No published transition plan; Banxico created a Directorate of Analysis and Policies of Environmental and Social Risks to coordinate work on climate/ESG across the Bank and with other authorities.
MONETARY POLICY ADJUSTMENT	▪ Bank Indonesia links reserve requirements to green lending through Macroprudential Liquidity Incentive Policy (KLM), allowing up to 0.5% GWM reduction for banks extending environmentally friendly property and vehicle credit. ▪ ESG assets, including green, sustainability-linked and social bonds, form a growing share of Bank Indonesia's reserve portfolio. However, it hasn't set a defining criteria for the assets it holds. ▪ BI has not yet adjusted its collateral framework or introduced targeted refinancing operations for climate- or nature-related purposes.	▪ Italy applies the European Central Bank (ECB) decisions as part of the Eurosystem.	▪ The strategy states that the BoJ will purchase foreign-currency-denominated green bonds issued by governments and foreign institutions under its existing reserve management principles. ▪ Under its Climate Response Financing Operations, the Bank of Japan provides zero-interest funds to banks against climate-related loans and investments, with rollovers allowed through FY2030. Cumulative take-up under this facility had reached around US$26 billion by late 2022.	▪ High level ambition to consider sustainability factors in the management of foreign exchange reserves but missing methodological details.
INVESTMENT OF OWN PORTFOLIO	▪ Public information indicates participation in regional reserve-investment initiatives (e.g., Asian bond funds) and support for green-bond market development, but details on ESG criteria, minimum standards, or formal tilts within BI's reserve portfolio are limited.	▪ Responsible Investment policies cover own funds, pension assets, euro-denominated portfolios and (in part) FX reserves through best-in-class approaches, issuer selection and thematic/green-bond allocations. Banca d'Italia explicitly refrains (for now) from setting short-/medium-term carbon-reduction targets.	▪ There is no disclosed ESG integration or portfolio tilts across BoJ's own-account assets.	▪ Consideration of ESG criteria in investment decisions as part of the SRI strategy. However, methodology, minimum standards, and formal tilts are not specified.
CENTRAL BANK DISCLOSURE	▪ No sustainability disclosure of the central bank's monetary or non-monetary portfolio.	▪ Banca d'Italia publishes an annual "Sustainable Investments and Climate-Related Risks" report for its own-account (non-monetary) portfolios, structured along the TCFD pillars. ▪ The report discloses climate and broader ESG metrics, as well as EU Taxonomy indicators such as "revenue from environmentally sustainable activities (%)" for equity and corporate bond holdings. ▪ It also reports nature-related exposure metrics, including the exposure to sectors with material nature dependencies and impacts.	▪ The BoJ published TCFD-style climate disclosure reports on the Bank's climate initiatives/risks (governance, strategy, metrics). ▪ However, detailed portfolio-level C/E/S exposures or taxonomy-alignment metrics are not disclosed.	▪ No sustainability disclosure of the central bank's monetary or non-monetary portfolio.

G20 PROGRESS ON CENTRAL BANKING OPERATIONS AND LEADERSHIP CONT.

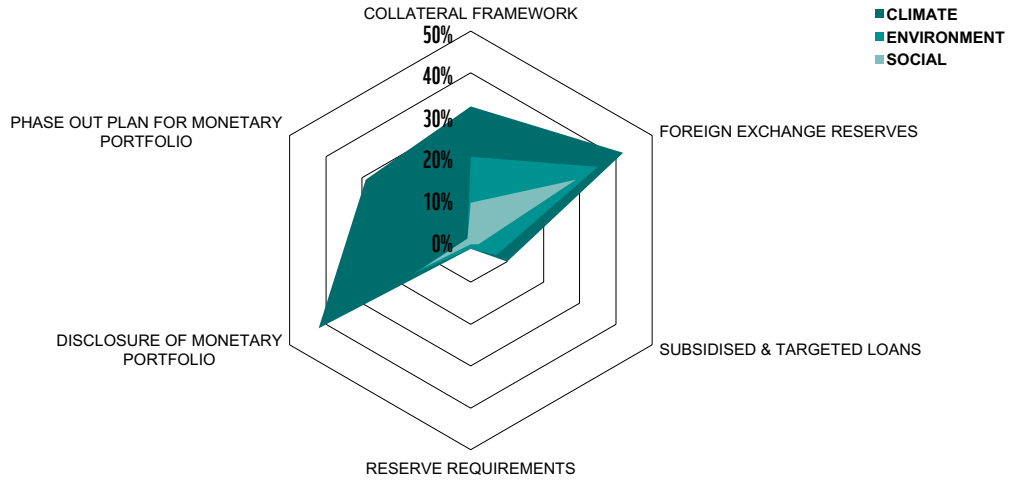
	SAUDI ARABIA	SOUTH AFRICA	SOUTH KOREA	TÜRKIYE
CENTRAL BANK STRATEGY	▪ No published climate/nature strategy or transition plan for Saudi Arabian Monetary Authority (SAMA).	▪ The South African Reserve Bank (SARB) has articulated a climate work programme and governance across its reports, including the Prudential Authority's Climate Roadmap 2024–26 for supervision.	▪ Bank of Korea (BoK) published climate response pages and a Climate Change Response Strategy (research- and coordination-focused), plus an Office of Sustainable Growth.	▪ No published climate/nature strategy or transition plan by the central bank itself.
MONETARY POLICY ADJUSTMENT	▪ No evidence of climate/nature specific monetary instruments (e.g., green collateral factors, targeted green refinancing) in SAMA's operational toolkit.	▪ No climate-specific monetary policy instruments disclosed (no green collateral haircuts/targeted refinancing).	▪ The BoK states that it is exploring climate-related uses of monetary policy instruments and has published research on possible options, such as adjusting collateral haircuts and eligibility or introducing green purchase programs, but no climate-specific tool is yet in force. ▪ The BoK also indicates that it is expanding ESG investment in foreign-currency assets and reserves, although it provides limited public detail on the underlying criteria, minimum standards, tilts or asset-class coverage.	▪ No climate/nature adjustments to monetary instruments disclosed within the policy framework.
INVESTMENT OF OWN PORTFOLIO	▪ Public disclosure on reserve management and annual/financial stability reports do not disclose ESG integration, exclusions, or tilts in SAMA's own-account portfolios.	▪ SARB has reached a significant milestone in its reserve management investment framework and is in the process of investing EUR 150 million in a green bond. It is doing further work to incorporate ESG considerations into its investment portfolios ▪ The Corporation for Deposit Insurance (CODI) board has approved the incorporation of ESG in its investment policy and guidelines, and work is underway to adopt similar policies for other portfolios, including the CPD and the SARB Pension Fund.	▪ High level integration of C/E/S bond purchases and negative screening, but missing details on criteria and standards used.	▪ Public disclosure on reserve management focus on safety-liquidity-return. No evidence of ESG screens/tilts or a responsible-investment policy covering the Bank's own portfolios.
CENTRAL BANK DISCLOSURE	▪ No sustainability disclosure of the central bank's monetary or non-monetary portfolio.	▪ SARB reports on climate work in its annual/integrated reports, but there is no portfolio-level TCFD report for its own investments.	▪ No sustainability disclosure of the central bank's monetary or non-monetary portfolio.	▪ No sustainability disclosure of the central bank's monetary or non-monetary portfolio.

G20 PROGRESS ON CENTRAL BANKING OPERATIONS AND LEADERSHIP CONT.

	UK	USA
CENTRAL BANK STRATEGY	▪ The Bank has a published a Climate Transition Plan. Its net-zero target covers own operations, with transition planning reported against each year.	▪ No dated transition/Net-Zero plan for the Fed's own operations or portfolios. In 2025, the Fed withdrew from the NGFS citing mandate limits.
MONETARY POLICY ADJUSTMENT	▪ Climate was integrated into the Corporate Bond Purchase Scheme (CBPS) via tilts/exclusions, and climate risks are being incorporated into collateral risk management within the Bank's operations.	▪ No climate/nature specific monetary instruments (no green collateral factors, targeted green refinancing, or climate tilts in asset purchases).
INVESTMENT OF OWN PORTFOLIO	▪ ESG integration is explicit for the Bank of England Pension Fund (trustee policy requiring managers to consider ESG/climate risks.	▪ No integration of E&S considerations into own asset management practices.
CENTRAL BANK DISCLOSURE	▪ The Bank publishes annual climate-related financial disclosures in line with TCFD covering monetary and non-monetary operations (governance, strategy, risk, metrics/targets) and updates on transition planning.	▪ No sustainability disclosure of the central bank's monetary or non-monetary portfolio.

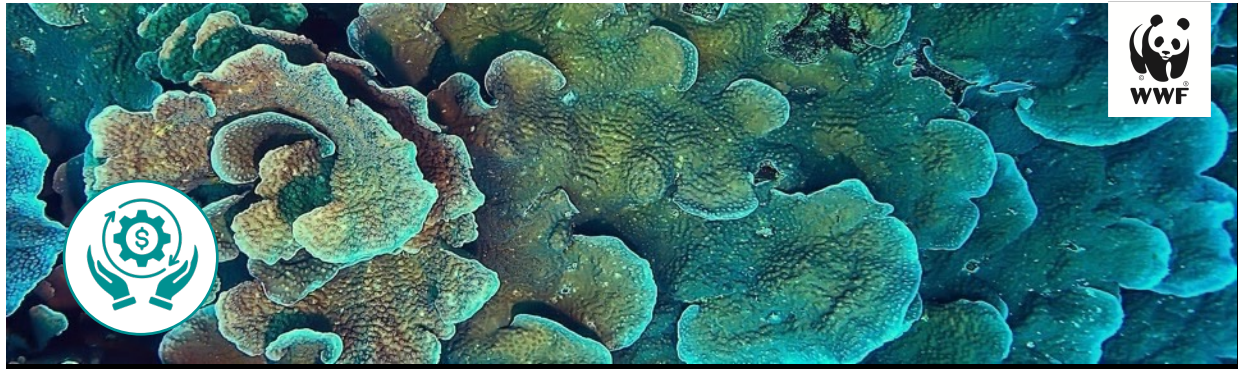
THE MAJORITY OF APPLIED MONETARY POLICY TOOLS REMAIN CLIMATE AND NATURE-BLIND, WITH CENTRAL BANK ACTIONS LARGELY LIMITED TO THEIR OWN-PORTFOLIO MANAGEMENT

FIGURE 10: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS OF CENTRAL BANKING



Note: The number displayed on the graph represents the average fulfillment of indicators.
Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

In 2025, Bank Al-Maghrib continued to green its foreign-exchange reserves by subscribing to a US$150 million sustainable bond issued by the International Fund for Agricultural Development (IFAD), its second private placement with IFAD following a EUR 100 million sustainable bond in July 2024. *Under IFAD's Sustainable Development Finance Framework, the proceeds finance projects that transform rural areas by improving livelihoods, food security and resilience. The repeat transaction underscores the strength of the long-term partnership between IFAD and Morocco, while further increasing the share of sustainability-linked assets in Bank Al-Maghrib's prudential reserve portfolio. This builds on earlier steps, including the US$100 million investment of reserves in World Bank green bonds in 2016.*



MONETARY POLICY

Integrating climate and environmental factors into monetary policy and central banking underscores the pivotal role of central banks in enabling the necessary economic transition. Such transition can only be facilitated when nature and climate are valued within a central banks' financial mechanisms, such as collateral frameworks, climate-related disclosures of monetary portfolios, and the management of foreign exchange reserves. These three indicators show the highest achievement scores from a climate-perspective at 31%, 40%, and 42% respectively. These levers are preferred because they primarily strengthen risk management and transparency, preserve neutrality, and rely on data and market segments where metrics and liquidity are relatively more developed

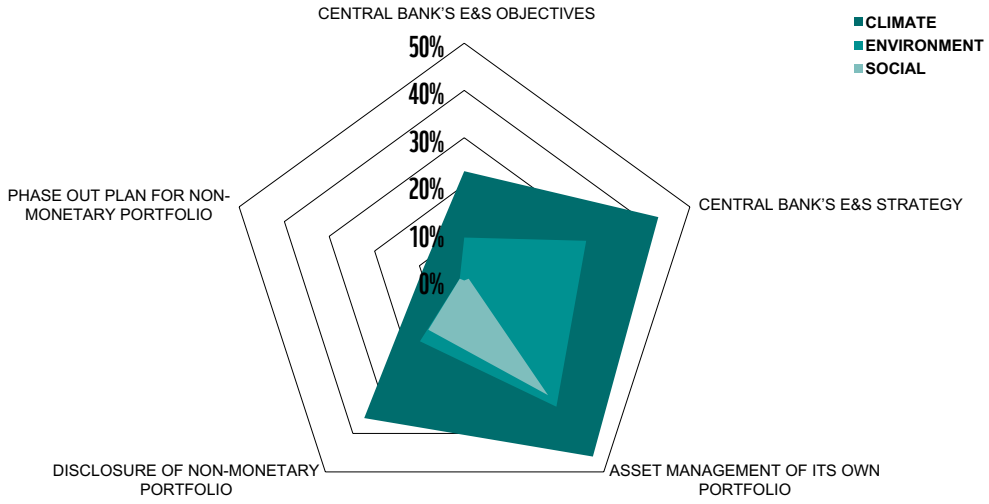
Despite the key role central banks play in promoting a resilient and sustainable economy, the assessment revealed on average a low achievement in the following areas from a climate perspective, and virtually no fulfillment when considering environment and social: Offering subsidized loans or preferential targeted refinancing on climate considerations (10%); Considering climate-related risk when determining reserve requirements for banks (2%); and Establishing a phase-out plan on assets linked to the most environmentally-harmful activities (27%).

A prudent path is to adjust tools only where this improves risk control and implementation resilience, run small pilots (e.g., collateral add-ons tested internally), publish the method and denominators, and scale gradually as data quality and legal clarity improve. Crucially, when climate-related risks are directly priced into key monetary policy tools (such as collateral frameworks, haircuts, and asset purchases) the effect is systemic. These tools anchor benchmarks for pricing and collateral across markets, sending ripple effects through the financial system and real economy, and signaling that fossil-fuel-heavy assets are structurally riskier and therefore more costly to hold and finance.

Neutrality serves to safeguard central banks' mandates and the effective transmission of policy. However, in the face of rising climate risks in the economy, inaction is not neutral. Where climate risks are demonstrably mispriced, risk-based adjustments can both correct implementation biases and align system-wide price signals more closely with underlying risk, while still respecting mandate boundaries and leaving broader climate policy (taxes, standards, subsidies) to elected authorities.

CENTRAL BANKS PRIORITIZE CLIMATE RISKS WITH GROWING FOCUS ON DEVELOPING STRATEGIES, ROADMAPS, AND INTEGRATION INTO OWN ASSET MANAGEMENT INVESTMENTS

FIGURE 11: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS OF CENTRAL BANKING



Note: The number displayed on the graph represents the average fulfillment of indicators.
Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

Banco Central de Chile is advancing a research agenda to embed environmental and energy variables in the macro models it uses for monetary policy. *The work maps inflation channels (e.g., energy-price shocks, drought impacts on food and electricity) and explores implications for the neutral rate, productivity, and risk premia, so climate and transition dynamics can be reflected in forecasting and scenario design. The policy paper outlines how climate change may have medium-to-strong direct effects in Chile, with significant indirect effects from global green transitions, and are building tools and satellite models to quantify these mechanisms alongside standard projections.*

CENTRAL BANKS' OWN INVESTMENT STRATEGY AND LEADERSHIP

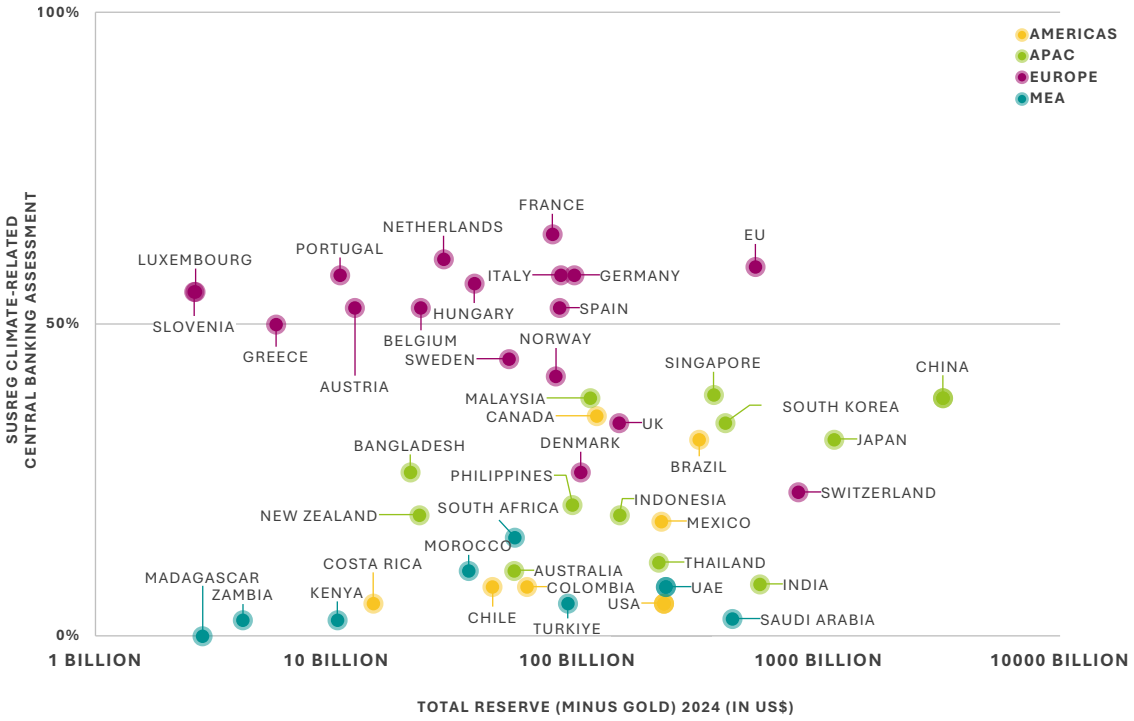
Central banks operate not only as "guardians" of both monetary and financial stability, but they also play a significant role in addressing systemic climate- and environmental-related risks and impacts. Thus, the practice of central banks incorporating climate, environment and social factors within their own asset management practices ensures that these larger investments avoid contributing to environmentally- harmful activities and promotes the resilience of these investments to sustainability risks.

The higher achievement rate of 46% across the assessed central banks indicates a trend of considering the sustainability aspects of the stability of the wider financial system, primarily through Socially Responsible Investment (SRI) policies, minimum safeguards, and selective holdings of green/sustainability/social bonds. This may also indicate to other institutional investors that this is priority considered by the so-called "guardians" themselves, with leadership expressed via disclosures and research that make methods replicable.

Both the assessment and disclosure of non-monetary portfolio risks as well as the establishment of an official science-based internal strategy and transition plan are similarly considered from a climate perspective, with 34% and 43% achievement, respectively. However, both the setting of nominal anchors beyond conventional ones, and the decision of phasing out environmentally-harmful activities scored much lower across climate, environment and social. Most central banks now publish sustainability strategies, but few pair them with explicit nominal anchors or targets, for example, goals aligned to the Paris Agreement or the Kunming Montreal Global Biodiversity Framework. As a result, commitments tend to emphasize risk management and transparency rather than time-bound portfolio pathways tied to Paris or Kunming objectives.

4 OUT OF 5 TOP RESERVE-HOLDING CENTRAL BANKS FALL BELOW 50% ALIGNMENT WITH SUSREG CLIMATE CRITERIA

FIGURE 12: SUSREG CLIMATE-RELATED CENTRAL BANKING ASSESSMENT & THE CENTRAL BANKS' TOTAL RESERVE



Source: Total reserve data was taken from the World Bank, 2024.
Note: Total reserves, excluding gold, include special drawing rights (SDRs), IMF reserve positions, and foreign exchange holdings controlled by monetary authorities. Gold holdings are not part of this calculation. Data on total reserves is available for Uganda up to 2018, for Zambia up to 2022, and for other countries up to 2023

[1] Network for Greening Financial System. (2024). Nature-related Financial Risks: a Conceptual Framework to guide Action by Central Banks and Supervisors.

It is integral for central banks to adopt sustainable investment practices and to systematically consider the climate and the environment in monetary policies. The NGFS mirrors this within the Framework Guide proposing actions for central banks, in which the key role of central banks is underscored by the importance of aligning sustainability within their investment activities, integrating such considerations within their collateral management and asset purchase system. This enables central banks to lead by example and inspire other financial institutions and investors.[1]

Although frameworks like those developed by the NGFS are available, countries with high reserves appear not to have implemented them yet. Our 2025 assessment found that 4 out of the top five jurisdictions with the highest reserves do not meet the 50% threshold of the SUSREG criteria for integrating climate-related risks into central banking activities, including the management of their monetary portfolios.

Among countries with the largest total reserves, the EU stands out with a 59% alignment score on the climate assessment, with almost all EU Member States above the 50% threshold, reflecting the role of the European Central Bank (ECB) in setting monetary policy for the Eurosystem. Recent ECB initiatives, including the introduction of a climate factor in the collateral framework, have contributed to this result. These measures are intended to protect the implementation of monetary policy in the EU from physical and transition risks that markets have not yet fully priced in.

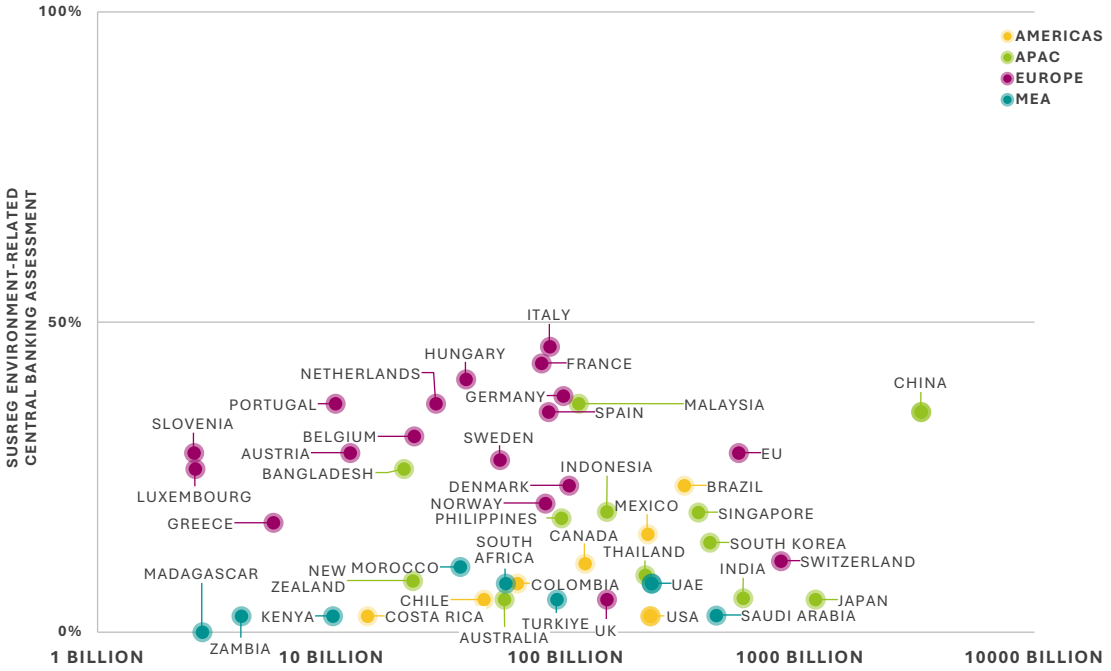
Outside Europe, several central banks are also progressing through different channels, for example, the Bank of Japan's climate response operations (targeted lending via financial institutions), the People's Bank of China's carbon-emission reduction facilities, and reserve-management SRI practices reported by institutions such as the Bank of Korea and the Central Bank of Chile.

Overall, variation in legal mandates, market depth, and reserve-management constraints helps explain why some jurisdictions move first on disclosures and own-portfolio SRI, while others pilot targeted lending or collateral practices; converging on transparent methods and clear guardrails can raise alignment without impinging on core monetary objectives.

Banca d'Italia's 2025 Annual report follows the TCFD framework and adds metrics for total Scope 3 emissions, share of sustainability/SLB/social bonds, and exposure to sectors with material nature-related dependencies/impacts.
The Bank also discloses EU Taxonomy-aligned revenue: 9.3% for equities in the financial portfolio, 14.0% for equities in FX-reserve and pension portfolios, and 6.9% / 5.2% / 6.7% for corporate bonds across financial, FX-reserve and pension portfolios, respectively. It applies a best-in-class issuer approach, maintains a thematic transition equity sleeve (dedicated equity sub-portfolio Banca d'Italia created to focus on euro-area companies whose products/activities enable the low-carbon transition), and includes green/labeled bonds in financial and reserve portfolios.

NO CENTRAL BANKS SURPASS 50% ALIGNMENT WITH SUSREG ENVIRONMENTAL CRITERIA FOR CENTRAL BANKING

FIGURE 13: ENVIRONMENT-RELATED CENTRAL BANKING ASSESSMENT & THE CENTRAL BANKS' TOTAL RESERVE



Source: Total reserve data was taken from the World Bank, 2024.
Note: Total reserves, excluding gold, include special drawing rights (SDRs), IMF reserve positions, and foreign exchange holdings controlled by monetary authorities. Gold holdings are not part of this calculation. Data on total reserves is available for Uganda up to 2018, for Zambia up to 2022, and for other countries up to 2023

[1] European Central Bank. (2023). Living in a world of disappearing nature: physical risk and the implications for financial stability.
[2] Sustainable Finance Lab (2024). Finding a Way with Nature: How central banks and supervisors can start acting on nature-related risks.

As biodiversity declines worldwide due to deforestation, overexploitation, climate change and pollution, vital ecosystems are increasingly under threat. This vulnerability extends to financial markets, with central banks, major investors themselves, being no exception. A study by the European Central Bank (ECB) found that 75% of euro banks' corporate exposure are highly dependent on at least one ecosystem service.[1] By allocating reserves to corporate bonds and equities, central banks expose themselves to the financial risks associated with the loss of these essential ecosystem services.

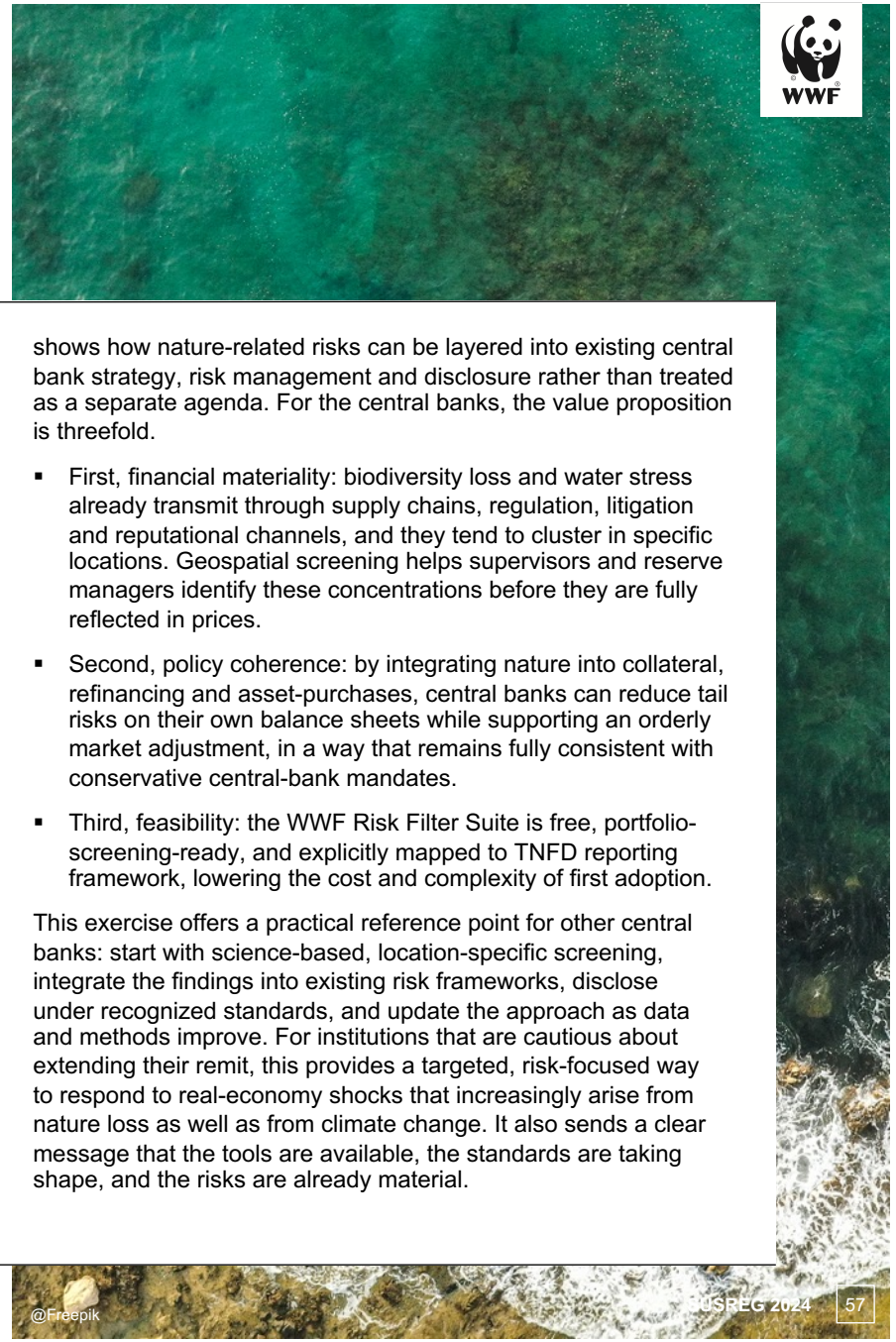
The results of this year's SUSREG assessment mirror those of the previous years. Central banks in countries with substantial reserves continue to show low alignment with SUSREG's environmental criteria, with none of the top 10 countries meeting even 50% of the threshold. This indicates that these countries have yet to fully integrate nature-related risks into their operational frameworks. High-reserve institutions also face practical constraints, currency/ tenor needs and intervention readiness, that limit rapid portfolio shifts, even when nature analytics are improving.

Typically, central banks address nature-related financial risks by conducting research to understand their impact on financial stability and the broader economy. This includes assessing the exposure of their equity and corporate bond holdings to industries or companies that are either vulnerable to environmental degradation or contribute to it.

A report from the Sustainable Finance Lab sets out practical recommendations for how central banks can address nature-related risks within their existing mandates. This includes developing and publishing a shared (sub)sector map of environmentally harmful activities; carrying over lessons from climate integration in monetary operations to nature; and, where feasible, extending tilting in asset-purchase and own-fund portfolios to incorporate nature-risk indicators. The report also suggests piloting risk-based collateral measures, such as higher haircuts for issuers associated with severe, evidenced nature degradation, and subject to legal feasibility, testing a nature-focused Targeted Longer-Term Refinancing Operations (TLTRO) to support lending to verifiable nature-positive activities.[2]

Banque de France is putting nature at the core of its work and expanding disclosure. Since 2023 it has published portfolio-level biodiversity indicators and, in 2025, added the euro- and FX-denominated sovereign portfolios held against the monetary base. *Metrics use Iceberg Data Lab's Corporate Biodiversity Footprint aggregating land use, air and water pollution, and climate pressures, and report three metrics: total absolute impact, biodiversity footprint per EUR million, and weighted average biodiversity intensity. In 2024 results, sovereign absolute impact declined, portfolios generally outperformed the benchmark index. The Bank also invested €37 million in nature-thematic funds (e.g., marine biodiversity, forest regeneration).*

LEVERAGING THE WWF RISK FILTER SUITE: MNB'S APPROACH TO INTEGRATING BIODIVERSITY AND WATER RISKS INTO CENTRAL BANK DISCLOSURES



Following the 2 August 2021 amendment, which extended the Hungarian Central Bank (Magyar Nemzeti Bank)'s mandate to support government policy on environmental sustainability and legally obliged it to integrate environmental considerations into its activities without compromising its primary objective, the MNB developed an environmental sustainability strategy encompassing its monetary policy toolkit, reserve management, and supervisory activities. In line with this strategy, the MNB analyzes the climate-related risk exposure of its financial assets by portfolio and has expanded its analytical framework to include broader nature-related risks and impacts.

The MNB assesses the climate-related risk exposure of its financial assets by portfolio, across the two main risk categories of transition and physical risks. In line with the principle of double materiality, it also examined the environmental impact of the instruments it finances. In this framework, double materiality means that climate change can appear as a financial risk factor for the institution, while the institution's own activities and investments also affect the environment. The primary indicator used by the MNB to measure transition risk is Weighted Average Carbon Intensity (WACI). Based on the principle of double materiality, WACI is treated both as an "impact"-type indicator of the emissions profile of the financed portfolio and as a proxy for transition risks.[1]

This year, the MNB broadened its climate-risk disclosure to encompass an analysis of broader nature-related risks, given that ecosystem services, the loss of biodiversity and climate change are closely interrelated.

To analyze these nature-related risks and impacts for the countries in its portfolios, the MNB uses the WWF Risk Filter Suite, which provides a good starting point for this work. The platform is based on two key framework: the WWF Biodiversity Risk Filter provides a general and high-level assessment of the risks of biodiversity loss, while the WWF Water Risk Filter allows for a deeper analysis of water-related risks (e.g. water scarcity, water quality).

The data are available at specific geolocation levels, and at regional and national aggregation level, and the framework covers several risk categories in line with the TNFD recommendations, including physical and reputational (transition-regulatory) risks. In the case of portfolios held for monetary policy purposes in Hungary, the WWF Risk Filter data show that water-related risks are present in the categories of water quality and floods, and that "cultural services" may be particularly relevant for sectors such as tourism, real estate and education.

Methodologically, this brings central banks closer to the emerging Taskforce on Nature-related Financial Disclosures (TNFD) framework. WWF's tools align with TNFD's LEAP approach (Locate, Evaluate, Assess, Prepare), providing ready-made inputs on physical, regulatory and reputational risk channels, as well as a practical starting point for metrics and scenario analysis.

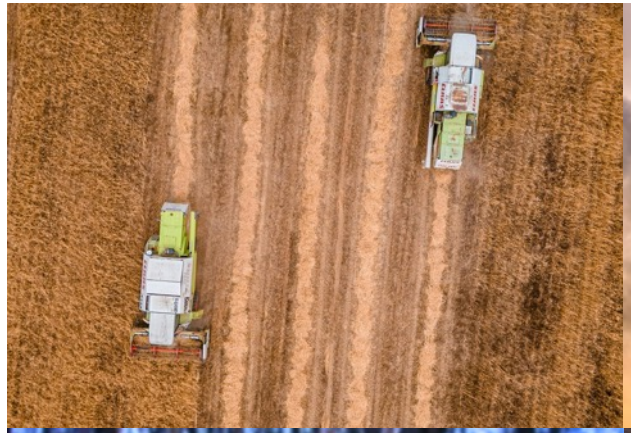
This is especially important as market standards converge. TNFD's recommendations, now used by hundreds of institutions, mirror TCFD's pillars of governance, strategy, risk management and metrics/targets, while adding nature-specific requirements such as location-based information and ecosystem-service dependencies. For central banks, the outcome is a credible, replicable way to extend existing climate-risk processes to nature without having to reinvent the wheel.

From a broader system perspective, the MNB's 2025 disclosure shows how nature-related risks can be layered into existing central bank strategy, risk management and disclosure rather than treated as a separate agenda. For the central banks, the value proposition is threefold.

- First, financial materiality: biodiversity loss and water stress already transmit through supply chains, regulation, litigation and reputational channels, and they tend to cluster in specific locations. Geospatial screening helps supervisors and reserve managers identify these concentrations before they are fully reflected in prices.
- Second, policy coherence: by integrating nature into collateral, refinancing and asset-purchases, central banks can reduce tail risks on their own balance sheets while supporting an orderly market adjustment, in a way that remains fully consistent with conservative central-bank mandates.
- Third, feasibility: the WWF Risk Filter Suite is free, portfolio-screening-ready, and explicitly mapped to TNFD reporting framework, lowering the cost and complexity of first adoption.

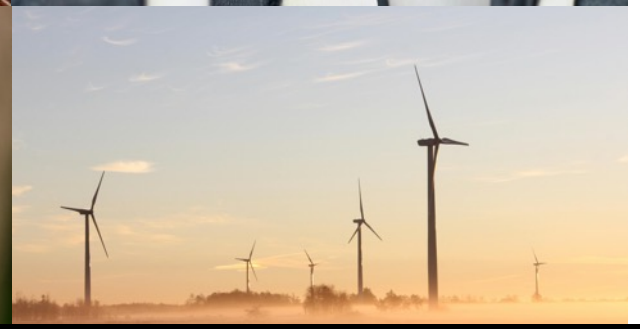
This exercise offers a practical reference point for other central banks: start with science-based, location-specific screening, integrate the findings into existing risk frameworks, disclose under recognized standards, and update the approach as data and methods improve. For institutions that are cautious about extending their remit, this provides a targeted, risk-focused way to respond to real-economy shocks that increasingly arise from nature loss as well as from climate change. It also sends a clear message that the tools are available, the standards are taking shape, and the risks are already material.

[1] Magyar Nemzeti Bank (2025). Climate-related Financial Disclosure of the Magyar Nemzeti Bank.
[1] World Wide Fund for Nature. (2025). Risk Filter Suite v2.0.

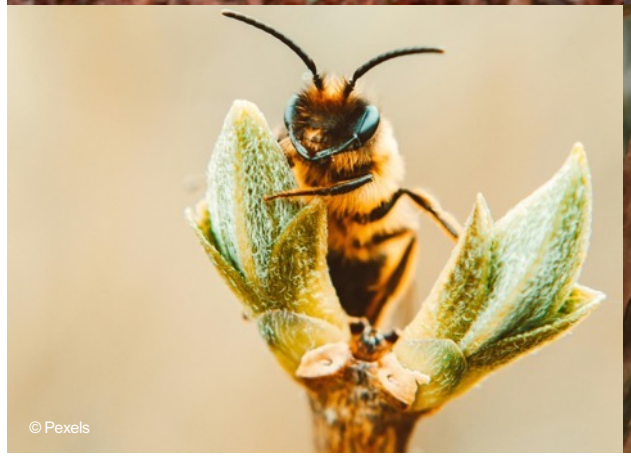


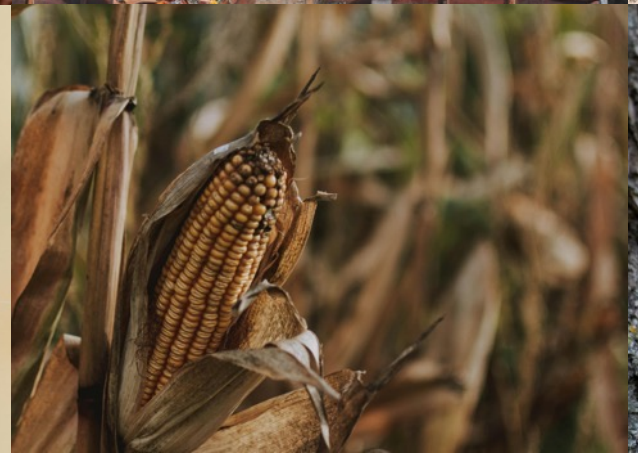




INSURANCE SUPERVISION





EXECUTIVE SUMMARY OF THE 2025 INSURANCE SUPERVISION ASSESSMENT

NOTABLE DEVELOPMENTS IN 2025

The supervisory floor in insurance is gradually rising. Insurers are increasingly expected not only to disclose exposures but also to demonstrate how climate and environmental risks shape their strategies. However, the depth and consistency of this integration vary widely between countries, with advanced jurisdictions pushing toward embedding in business decisions, emerging markets experimenting with first steps, and some political headwinds slowing progress.

- **Most supervisors move toward embedding climate and environmental risks into governance and risk management.** In many advanced markets, insurers are now expected to demonstrate how climate risk considerations influence underwriting, reserving and investment, with stress testing and scenario analysis in Own Risk and Solvency Assessments (ORSA) becoming central tools.

- **Divergences between the US and the rest of the world have widened.** At federal level, the SEC's 2024 climate-disclosure rule has faced strong legal and political pushback, and its future scope and timing are uncertain. At state level, a patchwork has emerged; regulators in states such as New York and California are pushing more demanding climate-risk expectations and TCFD-aligned insurance climate-risk disclosure, while a rising number of states are advancing or defending "anti-ESG" measures. This mix of ambitious and restrictive signals is increasing inconsistency across the US market and may complicate insurers' efforts to obtain comparable climate data and embed climate risks systematically in underwriting, investment and risk management.

- **Europe is pushing ahead and leading the emerging debate on capital.** Despite the proposed Omnibus deregulation in the EU, European and UK insurance supervisors are pressing for deeper integration of climate risks into business planning and capital discussions. The proposed amendments to Solvency II regulation require insurance companies to embed sustainability risk management on short, medium and long horizons, and adopt prudential plans to address financial risks from ESG factors, aligned, where relevant, with Corporate Sustainability Reporting Directive (CSRD) disclosures. Debate has also re-emerged about whether capital requirements should explicitly reflect environmentally harmful exposures, with the European Insurance and Occupational Pensions Authority (EIOPA) suggesting a capital surcharge on fossil fuel investments for EU insurers in 2024.

- **Incremental progress is visible in developing economies.** In Asia, Malaysia and Indonesia are advancing disclosure-based requirements. In Latin America, Brazil has taken a more proactive stance, embedding sustainability guidance into supervision and exploring nature-related risks, while Colombia is linking insurance oversight to its national green taxonomy, pushing insurers to align with sustainable finance objectives. In Africa, Morocco is emphasizing climate resilience and catastrophe risk management while South Africa has begun incorporating climate risk into prudential oversight and stress-testing. These steps remain modest but signal a widening global uptake.

- **Several broader trends are shaping the supervisory landscape.** Biodiversity and nature-related risks are increasingly referenced in new regulations and guidance (for instance in the EU, the Netherlands and Switzerland), but practical tools for integrating them into risk appetites and underwriting remain scarce, limiting their integration into core processes. Macroprudential approaches such as sectoral exposure limits or systemic buffers are still underdeveloped in insurance, even though micro-prudential (i.e., firm-level) supervision is maturing. Taxonomy initiatives are advancing in many regions (though the UK has abandoned its green taxonomy project), but their influence on capital allocation remains muted without stronger supervisory levers.

WHAT TO EXPECT IN THIS SECTION?

In this section, we will take a closer look at the key indicators used to assess the maturity and effectiveness of insurance supervision in addressing Climate, Environmental and Social (CES) risks. This includes an examination of a selection of key indicators, as well as an overview of regulatory policies of G20 countries. We will also deep dive into the EIOPA proposal of capital surcharge for the fossil fuel investments of EU insurers, and some pioneering regulatory initiatives at the state level in the US. This is followed by an analysis of how the following chosen indicators highlights strengths and weaknesses across countries and regions.

The key indicators for micro-prudential supervision focus on insurers' integration of environmental & social (E&S) considerations into policies and processes, active client engagement, incorporation of E&S factors into pricing and into minimum capital requirements, adherence to international disclosure frameworks, and the publication of supervisory monitoring reports.

The key indicators for macroprudential supervision cover supervisory activities such as scenario analysis and stress testing to evaluate insurers' exposure, the development of E&S risk indicators for ongoing monitoring, exposure limits to prevent the build-up of systemic risks, and the implementation of obligatory insurance mandates for catastrophes and natural disasters.

INSURANCE SUPERVISION INDICATORS

INSURANCE PRACTICES						SUPERVISOR PRACTICES		
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
SCOPE & IMPLEMENT-ATION	STRATEGY & GOVERNANCE	POLICIES & PROCESSES	PORTFOLIO RISK & IMPACT	CAPITAL REQUIREMENT	DISCLOSURE & TRANSPARENCY	MACRO-PRUDENTIAL	LEADERSHIP & INTERNAL	MONITORING & ENFORCEMENT
Regulations or guidance issued	Business & risk strategy	Sector policies	Portfolio management	Solvency capital requirement	Disclosure of business policies & processes	Supervisor's scenario analysis & stress testing	NGFS membership for supervisors	Monitoring report
Risks coverage	Risk appetite statement	Standards & certification	Scenario analysis & stress testing	ORSA*	Transition plan disclosure	Scenario analysis & stress testing method	Supervisor's E&S strategy & transition plan	Intervention action
Double materiality	Long-term consideration	Client support on international standard	Management of negative E&S impacts		Internationally recognised reporting frameworks disclosure	Scenario analysis & stress testing result	Internal organisation & resources (FS)	
Supervisory monitoring	Board communication	High risk sectors guidance	Climate target setting		Disclosure in annual report	Tipping point in scenario analysis	Study on insurer's exposure	
Public consultation	Remuneration policy	Integration in policies & processes	Nature target setting		Industry credit exposure	Risk indicator monitoring	Alignment to sustainability goals	
Expectations for reinsurers	Staff & resources	Three lines of defence	Risk concentration & ALM*		Disclosure against taxonomy	Exposure limit	Staff training	
	Board appointments	Non-compliance mitigation	Natural catastrophe claims*		Disclosure of portfolio exposure & mitigation	Obligatory insurance mandates*	Data quality initiatives	
	Board responsibilities	Active client engagement	Management of reputation & litigation risk		Disclosure of negative E&S impact	Integrated financial groups supervision*	Engagement with reinsurers*	
	Executive management responsibilities	Data & IT infrastructure	Validation of outsourcing services		Greenwashing risks*	Systemic risks buffer capital requirement		
	Core functions		Risk concentration management*		External assurance for the disclosure			
	Training		E&S risk in pricing*					
	Stakeholder engagement		Scenario analysis in pricing*					
	Product development		Pricing incentives*					

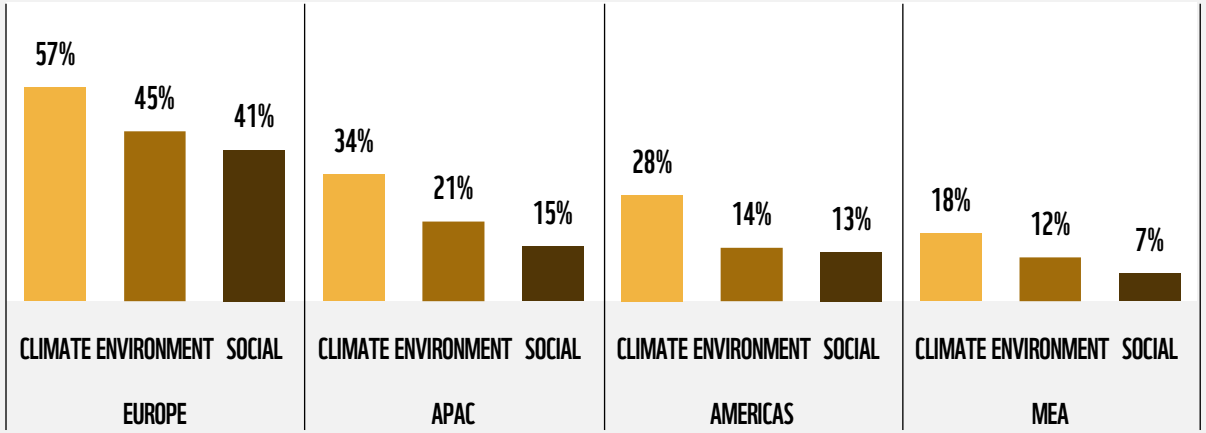
** Insurance specific*

***The Australian Prudential Regulation Authority (APRA) has launched an Insurance Climate Vulnerability Assessment (Insurance CVA) to examine how climate change could affect the affordability and availability of household insurance across Australia**. Working with five of the country's largest general insurers, the assessment models premiums and household incomes out to 2050 under different climate scenarios to identify where cover may become unaffordable or unavailable, including in cyclone- and flood-exposed regions such as northern Australia. APRA expects insurers to submit their findings in early 2025, with a public report to follow later this year. APRA's supervisory role focuses on ensuring that insurers' responses to these affordability pressures (for example through product redesign, repricing, or risk-sharing mechanisms) remain prudentially sound, risk-based, and supportive of a resilient insurance sector that can continue to serve vulnerable communities.*

*Despite a broader slowdown in US sustainability regulation at the federal level, the insurance sector, governed primarily by state regulators, continues to advance on climate resilience and consumer protection. **State-led initiatives through the National Association of Insurance Commissioners (NAIC) demonstrate steady progress in embedding climate risk into supervisory priorities, even as other sectors experience regulatory retrenchment**. In 2025, NAIC highlighted strengthening insurance market resilience to climate and disaster risks as a key focus area, including support for community-based mitigation, enhanced data collection and risk analytics for emerging climate exposures, and efforts to preserve the affordability and availability of coverage in high-risk regions. NAIC has also highlighted the importance of working with federal and state agencies to close protection gaps and modernize catastrophe-risk modelling.*

INSURANCE SUPERVISION LAGGING BEHIND BANKING, WITH MOST PROGRESS ON CLIMATE RISK INTEGRATION ACROSS JURISDICTIONS

FIGURE 14 AVERAGE FULFILMENT OF SUSREG INSURANCE SUPERVISION INDICATORS BY TOPIC AND REGION IN 2025



The EU's 2025 Solvency II amendment (Directive (EU) 2025/2) marks a significant strengthening of prudential expectations for insurers. *Now in force and being transposed across Member States, the revision explicitly embeds sustainability risk management into the core solvency framework. It introduces a new "small and non-complex" category to operationalize proportionality, while elevating climate scenario analysis to a Level-1 legal requirement within the Own Risk and Solvency Assessment (ORSA). Insurers must assess at least two long-term climate scenarios, below 2°C and well above 2°C, every three years, including quantified business-impact analyses. Boards are also required to adopt prudential plans with measurable targets to address financial risks from ESG factors, aligning these, where relevant, with corporate transition and sustainability plans under the CSRD. This marks the first time that climate and broader sustainability considerations are fully integrated into the binding prudential requirements of Solvency II.*

Note: Following methodological consultation, we reweighted indicators and raised the evidentiary bar by excluding non-binding industry guidance and stock-exchange rules. As a result, scores may decline without underlying regulatory change, hence, we do not present prior-year comparisons unless restated on the 2025 basis.

CLIMATE

Climate factors have the highest fulfilment across all SUSREG assessment pillars, with the highest alignment observed in the European Union. Despite the planned Omnibus deregulation and political uncertainty over key directives such as CSRD and CSDDD, the EU still leads the global field, notably due to the amendments to the Solvency II directive and the EIOPA proposals on prudential rules for insurers.

In Asia-Pacific, Singapore and Malaysia also belong to the countries with the most advanced integration of climate factors into insurance regulation and supervision, while the USA experienced setbacks at the federal level in 2025 due to political headwinds. Globally, and despite progress over the last years, the integration of climate risk in insurance supervision still lags behind banking supervision.

ENVIRONMENT

The integration of wider environmental and nature-related aspects into insurance regulation and supervision still lags behind climate-related considerations, with only 10 countries fulfilling more than 50% of SUSREG's environment criteria, comprising Singapore, the European Union and several EU member states, with France and Hungary in the lead.

However, there are also encouraging signs of progress in some jurisdictions. For example, in Switzerland, the new Swiss Financial Market Supervisory Authority (FINMA) circular on climate and nature, published last year, will require insurers to assess and manage material nature-related risks by 2028.

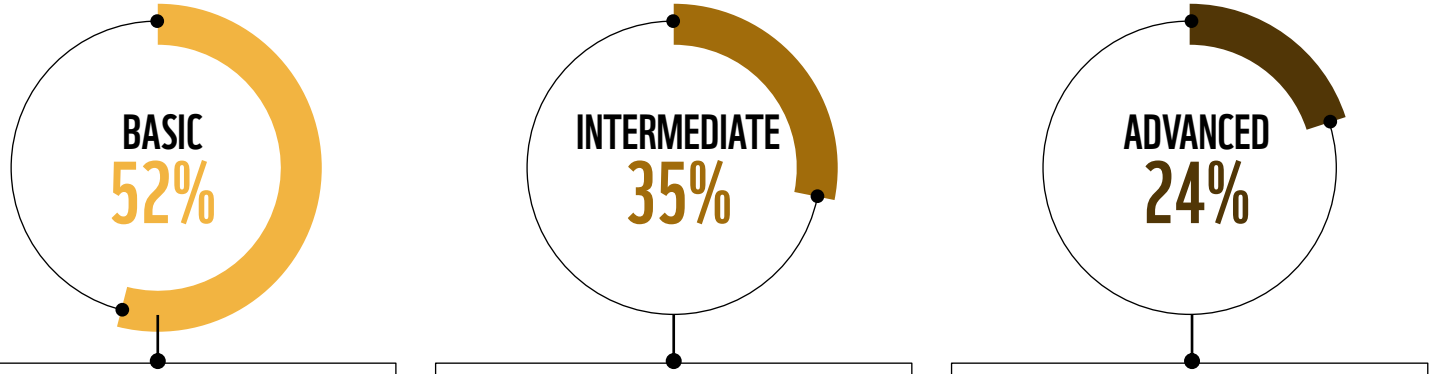
SOCIAL

Despite the key role of insurance to support development and provide financial protection to society, the explicit integration of social aspects into insurance regulation and supervision remains less developed than climate and nature-related considerations. The European Union and its member states are the most advanced in this respect, followed by China in Asia-Pacific.

Social risks and impacts also intersect with environmental topics, with climate change and nature loss contributing to rising issues of unaffordability and unavailability of insurance in several regions and leading to a protection gap which disproportionately affects the poor. This is a growing concern for insurance supervisors, with the EU and California being among the most proactive to tackle the problem.

INSURANCE SUPERVISORS MEET BASIC CLIMATE AND ENVIRONMENTAL EXPECTATIONS, BUT ADVANCED RISK INTEGRATION REMAINS LIMITED AND UNEVEN

FIGURE 15: AVERAGE ACHIEVEMENT OF CLIMATE AND ENVIRONMENT INSURANCE-SUPERVISION INDICATORS IN ASSESSED JURISDICTIONS BY CATEGORY



- Regulations or supervisory expectations are in place
- Coverage of C&E issues
- Public consultations
- Supervisory monitoring
- Governance & strategy
- Integration in policies & processes
- Portfolio risk management
- NGFS membership for supervisors
- Data quality initiative by supervisor
- National multi-stakeholder initiatives

- Double materiality
- Stakeholder engagement
- Active client engagement
- Data & IT infrastructure
- Integration into ORSA
- Disclosure in annual report and internationally recognised reporting frameworks
- Scenario analysis & stress test by supervisor
- Supervisor's C&E strategy
- Supervisor's study on insurance's exposure to C&E risks
- Engagement with re-insurers
- Product development

- Sector policies
- Integration of nature related risks
- Transition plan
- Climate and nature target setting
- Scenario analysis & stress testing by insurance companies
- Risk concentration management
- Pricing
- Solvency capital requirement
- Greenwashing risk
- Obligatory insurance mandate
- Systemic risk buffer capital

Note: The number displayed on the graph represents the average fulfillment of indicators for the climate and environmental assessment. In cases where an indicator is divided between climate and environment and/or between investment and underwriting, the results were given equal weight. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

The SUSREG indicators are split into three groups, depending on their level of complexity and ambition: Basic, Intermediate, and Advanced. Please see page 23 for the definitions of these categories and how supervisors are expected to improve their fulfilment of gradually more advanced indicators.

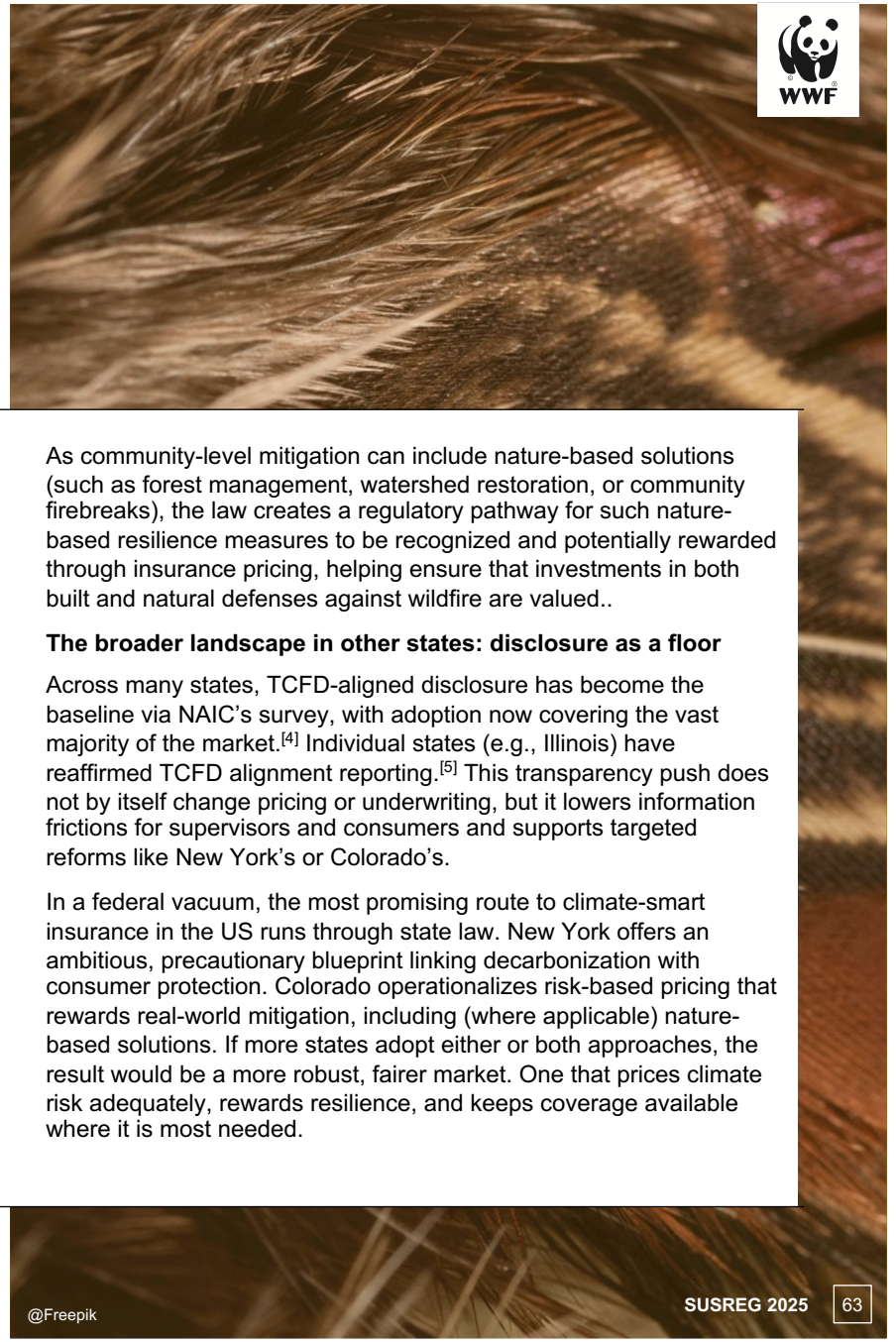
On average, 52% of the Basic indicators are fulfilled, showing that most countries have taken initial steps such as establishing regulations or supervisory expectations covering climate and environmental (C&E) issues, and beginning to integrate C&E considerations into governance, strategy, policies, processes and portfolio risk management.

However, only 35% of Intermediate indicators are fulfilled on average. This highlights the challenges insurance supervisors face in progressing from basic to more comprehensive expectations, such as the integration of C&E considerations into Own Risk and Solvency Assessment (ORSA) processes and into insurance product development.

The average fulfilment of Advanced C&E indicators remains low at 24%. The gap between basic and more advanced indicators highlights that many jurisdictions need to take more concrete steps to embed C&E risks and impacts into their regulatory frameworks and supervisory expectations. This also underscores the importance of moving beyond foundational efforts and addressing more complex and ambitious aspects such as climate and nature target setting for insurers, or the integration of C&E risks into their capital requirements.

***In February 2025, Taiwan's environment ministry announced a government-led plan to mobilize more than USD 1.5 billion in investments from insurance funds to accelerate the country's green transition**. A working group bringing together the environment and economy ministries and the Financial Supervisory Commission (FSC) will structure the investments in phases, while existing FSC green-finance policies and prudential rules are intended to ensure that risk management and supervisory safeguards remain intact as the insurance sector's contribution to national climate goals expands.*

STATE-LED CLIMATE PRUDENCE IN US INSURANCE: NEW YORK'S BILL AND COLORADO'S WILDFIRE-PRICING REFORM



In the United States, insurance is regulated primarily at the state level, not federally. While federal policy has shown limited ambition in addressing climate-related insurance challenges, several states are advancing pioneering regulatory initiatives.

New York – Insure Our Communities Act (S186/A3842)

New York's Insure Our Communities Act is a proposed bill still under consideration in the state legislature. If adopted, it would mark one of the most ambitious attempts in the U.S. to align insurance regulation with climate policy.[1,2] The bill would amend state insurance and financial services law to establish the Climate Protection Insurance Act, embedding the precautionary principle into supervisory practice. Key provisions under discussion include:

- Requiring insurers to align their practices with science-based emissions reductions targets, including prohibiting insurance underwriting for new oil, gas and coal projects, and requiring insurers to divest their investment funds from oil, gas and coal
- Requiring the state's insurance regulator, the Department of Financial Services (DFS) to report on the implementation of these provisions.
- Addressing "bluelining" (i.e., the practice of insurers withdrawing or denying coverage in climate-vulnerable, low-income, or minority communities) by prohibiting non-renewals of policies in such communities based on certain conditions.
- Directing DFS to conduct a study on maintaining affordable insurance options for disadvantaged communities.

While its scope is groundbreaking, the future of S186/A3842 remains uncertain, as both bills are currently in the Senate and Assembly Insurance Committees with no floor votes scheduled. Still, its introduction signals a growing willingness to use state insurance regulation as a lever for both decarbonization and social equity.

Colorado's HB25-1182: pricing the benefits of mitigation with nature-based solutions in scope

Outside of our sample of U.S. state jurisdictions, Colorado recently enacted a new law focusing on wildfire risk and insurance affordability.[3] The law requires insurers using catastrophe or wildfire risk models to:

- Consider mitigation efforts, including property-level and community-level actions, when assessing risk.
- Publish information on any rewards (such as premium discounts) that are available to policyholders who undertake mitigation efforts.
- Annually notify policyholders of their wildfire risk score and other classifications used to underwrite the policy.

As community-level mitigation can include nature-based solutions (such as forest management, watershed restoration, or community firebreaks), the law creates a regulatory pathway for such nature-based resilience measures to be recognized and potentially rewarded through insurance pricing, helping ensure that investments in both built and natural defenses against wildfire are valued..

The broader landscape in other states: disclosure as a floor

Across many states, TCFD-aligned disclosure has become the baseline via NAIC's survey, with adoption now covering the vast majority of the market.[4] Individual states (e.g., Illinois) have reaffirmed TCFD alignment reporting.[5] This transparency push does not by itself change pricing or underwriting, but it lowers information frictions for supervisors and consumers and supports targeted reforms like New York's or Colorado's.

In a federal vacuum, the most promising route to climate-smart insurance in the US runs through state law. New York offers an ambitious, precautionary blueprint linking decarbonization with consumer protection. Colorado operationalizes risk-based pricing that rewards real-world mitigation, including (where applicable) nature-based solutions. If more states adopt either or both approaches, the result would be a more robust, fairer market. One that prices climate risk adequately, rewards resilience, and keeps coverage available where it is most needed.

[1] New York State Senate. (2025). Senate Bill S186. Amendment A.
[2] New York State Senate. (2025). Assembly Bill A3842. Amendment A.
[3] Colorado General Assembly. (2025). HB25-1182: Risk Model Use in Property Insurance Policies.
[4] National Association of Insurance Commissioners. (2022, April 8). U.S. Insurance Commissioners Endorse Internationally Recognized Climate Risk Disclosure Standard for Insurance Companies.
[5] Illinois Department of Insurance. (2024). Company Bulletin CB2024-13 – Climate Risk Disclosure Survey.

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G20 PROGRESS IN INSURANCE SUPERVISION ACROSS KEY POLICY LEVERS

	AUSTRALIA	BRAZIL	CANADA	CHINA
SUPERVISORY EXPECTATIONS	▪ Climate	▪ Climate, Environment and Social	▪ Climate	▪ Climate, Environment and Social
MATERIALITY SCOPE	▪ Financial materiality	▪ Primarily financial materiality; outward 'impacts' are referenced at a high level (Art. 8) but not required as a full double-materiality assessment.	▪ Financial materiality	▪ Financial materiality
TARGET SETTING AND TRANSITION PLANNING	▪ The Australian Prudential Regulation Authority (APRA) does not mandate Paris-aligned or science-based targets for insurers. CPG 229 notes that institutions *may* choose to set climate-related targets and describes how such targets should link to metrics, strategy, and risk management, and may reference external sectoral, national, or international benchmarks. However, this remains guidance rather than a binding requirement for setting targets or preparing transition plans.	▪ Circular 666 issued by Brazil's insurance supervisor (SUSEP) obliges firms to adopt a sustainability policy and actions with measurable evaluation criteria and continuous monitoring. It does not prescribe Paris-aligned targets, but firms may set targets within their policy and report progress.	▪ The Office of the Superintendent of Financial Institutions (OSFI) requires firms to develop and implement a Climate Transition Plan and to disclose it (B-15 Ch.1 Principle 2; Annex 2-2 "Describe the FRFI's climate transition plan"). Guide B-15 expects internal metrics and targets but does not mandate Paris-aligned/science-based targets.	▪ Insurers in China are expected to set board-approved green-finance objectives and disclose ESG information, but they are not explicitly required to adopt Paris-aligned climate and nature targets or publish a formal "transition plan".
CAPITAL REQUIREMENT	▪ APRA expects climate risk to be integrated into governance, risk management and capital planning (ICAAP) for insurers under existing standards; CPG 229 explicitly discusses incorporating climate risk in the ICAAP and stress testing (ORSA-equivalent process).	▪ Brazil introduced an ORSA requirement for insurers via Brazil's National Council of Private Insurance (CNSP) Resolution 471/2024; climate/ESG risks are expected to be embedded in risk management and capital planning through ORSA, but there is no climate-specific capital charge.	▪ OSFI expects insurers to incorporate climate risks into the ORSA and capital planning.	▪ Under China Risk-Oriented Solvency System Phase II (C-ROSS II), insurers face a risk-based solvency regime with Pillar 2 qualitative requirements on risk management and capital planning. Sustainability risks are to be integrated in ORSA-equivalent processes.
DISCLOSURE AGAINST TAXONOMY	▪ No requirement for insurers to disclose against a taxonomy.	▪ No requirement for insurers to disclose against a taxonomy.	▪ No requirement for insurers to disclose against a green taxonomy. Canada's sustainable finance taxonomy is being developed by the federal government.	▪ Reporting by insurers focuses on green investment activities (guided by Asset Management Association of China's Green Investment Guidelines).
MACRO-PRUDENTIAL SUPERVISION	▪ Insurance Climate Vulnerability Assessment (Insurance-CVA) is underway with the five largest general insurers, examining affordability and availability of household insurance out to 2050.	▪ No regulator-led climate stress-test results for insurers yet.	▪ OSFI ran the Standardized Climate Scenario Exercise (SCSE) in 2024–25 (covering banks and insurers) and published aggregate results in 2025 with capability-building aims.	▪ Mandatory risk indicators reporting; China also operates a Compulsory Environmental Pollution Liability Insurance (CEPLI) regime (regulation adopted 2018) for high-polluting sectors.

G20 PROGRESS IN INSURANCE SUPERVISION ACROSS KEY POLICY LEVERS CONT.

	EU	FRANCE	GERMANY	INDIA
SUPERVISORY EXPECTATIONS	▪ Climate, Environment and Social	▪ Climate, Environment and Social	▪ Climate, Environment and Social	▪ Climate, Environment and Social
MATERIALITY SCOPE	▪ Prudential supervision remains anchored in financial (single) materiality, while disclosure through the CSRD/ESRS use double materiality	▪ Follows EU requirements	▪ Follows EU requirements	▪ Financial materiality
TARGET SETTING AND TRANSITION PLANNING	▪ CSRD/ESRS E1 require disclosure of a climate transition plan (E1-1) and targets where climate is material. ▪ Under ESRS E4 – Biodiversity & Ecosystems, in-scope issuers (including listed insurers) must disclose, where the topic is material, a transition plan and how biodiversity and ecosystem impacts, dependencies, risks and opportunities are reflected in strategy and the business model (E4-1). ▪ The Corporate Sustainability Due Diligence Directive (CSDDD) further requires large companies to have a plan compatible with the 1.5°C (Paris) objective. ▪ In parallel, Solvency II requires sustainability-risk plans (prudential, risk-management oriented).	▪ Follows EU requirements ▪ France's Article 29 Energy and Climate Law goes beyond the EU baseline by requiring credit institutions, including insurers, to disclose biodiversity-related risks and publish a strategy for aligning with long-term biodiversity objectives. This includes defining the scope of the value chain covered, setting targets for 2030 (updated at least every five years), and demonstrating how the strategy aligns with global goals such as the Convention on Biological Diversity (CBD).	▪ Follows EU requirements ▪ Germany is in the process of transposing the CSRD, but the implementation act has not yet entered into force. ▪ Germany is preparing for the transposition of the EU CSDDD. In September 2025, the Federal Cabinet approved a draft bill to amend the German Supply Chain Due Diligence Act (LkSG) as an interim easing measure, and the legislative process is still ongoing.	▪ No requirement for banks to set climate or nature targets nor disclose their transition plan.
CAPITAL REQUIREMENT	▪ Partial or proposed integration of climate in Solvency II capital requirements (e.g., 2023/24 reassessment of the Solvency II NatCat risk module parameters). ▪ Climate and sustainability risks included in ORSA.	▪ Follows EU requirements	▪ Follows EU requirements	▪ India is transitioning toward a risk-based solvency regime (C-ROSS-style), but there is no explicit climate capital charge and no Solvency-II-type ORSA mandate yet
DISCLOSURE AGAINST TAXONOMY	▪ Insurers must disclose Article 8 Taxonomy: share of Taxonomy-aligned investments, and non-life underwriting "green premium ratio"). ▪ EIOPA tracks outcomes (e.g., 2024 factsheet on insurers' green investments).	▪ Follows EU requirements	▪ Follows EU requirements	▪ India released a draft Climate Finance Taxonomy framework (May 2025), but there is no requirement for insurers to disclose taxonomy-aligned KPIs.
MACRO-PRUDENTIAL SUPERVISION	▪ EIOPA has conducted several climate scenario analyses. ▪ It has also developed a Natural Catastrophe Insurance Protection Gap Dashboard and strengthened its sustainability risk monitoring.	▪ France has run detailed insurer climate scenario exercises: ACPR's pilot (results published 2021) and a second insurance-only stress test (2022–24) published March 2025. ▪ France also operates the mandatory Cat Nat natural-catastrophe scheme with public reinsurance via Caisse Centrale de Réassurance (CCR).	▪ In 2025, the incoming coalition's agreement announced plans to introduce mandatory natural-hazard (Elementarschaden) insurance for residential buildings.	▪ No Insurance Regulatory and Development Authority of India (IRDAI)-led macro climate stress test for insurers has been published. ▪ Separately, the government has begun discussions on a nationwide parametric climate-linked insurance scheme.

G20 PROGRESS IN INSURANCE SUPERVISION ACROSS KEY POLICY LEVERS CONT.

	INDONESIA	ITALY	JAPAN	MEXICO
SUPERVISORY EXPECTATIONS	▪ Climate, Environment and Social	▪ Climate, Environment and Social	▪ Climate	▪ ESG expectations for insurers' investments policies under the National Commission of Insurance and Securities (CNSF) Circular Modificatoria 2/24 (effective Jan 2025)
MATERIALITY SCOPE	▪ Financial materiality (with some limited mentions of impacts).	▪ Follows EU requirements	▪ Financial materiality	▪ Financial materiality
TARGET SETTING AND TRANSITION PLANNING	▪ Insurers are not required to set science-based climate/nature targets. However, they must prepare a Sustainable Finance Action Plan (RAKB) with 5-year and 1-year components under Indonesian Financial Services Authority (Otoritas Jasa Keuangan (OJK)) Regulation (POJK) 51/2017.	▪ Follows EU requirements ▪ However, Italy has not yet transposed the CSDDD into national law.	▪ Japan Financial Services Agency (FSA) expects insurers to develop and disclose a climate transition strategy and to set internal metrics/targets where relevant, but it does not mandate Paris-aligned/science-based targets.	▪ No requirement for insurers to set climate or nature targets nor disclose their transition plan.
CAPITAL REQUIREMENT	▪ Indonesia does not operate a Solvency-II ORSA. However, insurers are expected to integrate sustainability risks within risk management under OJK rules	▪ Follows EU requirements	▪ Japan FSA provides application/good-practice guidance, climate risk in ORSA is encouraged but not mandatory	▪ No climate-specific capital requirements and no explicit ORSA-style climate mandate in the insurance solvency framework.
DISCLOSURE AGAINST TAXONOMY	▪ No requirement for insurers to disclose against a taxonomy.	▪ Follows EU requirements	▪ No requirement for insurers to disclose against a taxonomy.	▪ Mexico's Sustainable Taxonomy is in rollout. Upcoming disclosures are being developed at the market/issuer level; no insurer-specific taxonomy KPI has been mandated to date.
MACRO-PRUDENTIAL SUPERVISION	▪ No supervisory activities at the macro level.	▪ No climate scenario analysis or stress test to date. ▪ However, Italy's insurance supervisory authority (IVASS) has published a report on monitoring natural disasters and sustainability risks, surveying all Italian insurers. It aims to understand the potential implications of physical and transition risks on insurance sector stability and how insurers can reduce the protection gap and support the transition to a sustainable economy. ▪ From 2025, mandatory nat-cat cover is introduced under the 2024 Budget Law and its implementing decree, all businesses (including Italian establishments of non-Italian businesses) must now purchase insurance coverage against natural catastrophes.	▪ Two insurance climate scenario analyses exercises: (i) In FY2021 the Japan FSA ran a pilot climate-risk scenario analysis) with three major non-life insurance groups, results were published in August 2022 and; (ii) In June 2025 the FSA published its *2nd Scenario Analysis* conducted with non-life insurers and the General Insurance Rating Organization of Japan (GIROJ), with top-down coverage of all non-life fire insurers and a bottom-up sample of 19 insurers.	▪ No supervisory activities at the macro level.

G20 PROGRESS IN INSURANCE SUPERVISION ACROSS KEY POLICY LEVERS CONT.

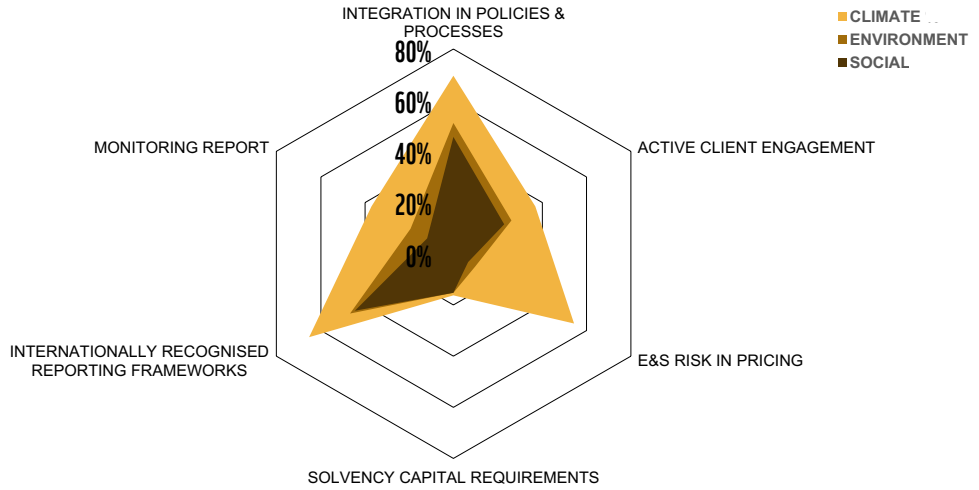
	SOUTH AFRICA	SOUTH KOREA	TÜRKIYE
SUPERVISORY EXPECTATIONS	▪ Climate	▪ Climate	▪ No official, insurer-specific climate supervisory expectations published by Insurance and Private Pension Regulation and Supervision Agency (Sigortacılık ve Özel Emeklilik Düzenleme ve Denetleme Kurumu/SEDDK) as of now
MATERIALITY SCOPE	▪ Financial materiality	▪ Financial materiality	▪ No official, insurer-specific climate supervisory expectations published by SEDDK as of now
TARGET SETTING AND TRANSITION PLANNING	▪ No mandate for science-based/Paris-aligned targets for insurers. Guidance expects firms to disclose climate information (metrics/targets if used); transition-plan disclosure is encouraged where relevant, not a binding requirement.	▪ Supervisory materials reference consideration of international objectives (e.g., Paris Agreement) in climate-risk management, but there is no mandate for insurers to publish Paris-aligned targets or a transition plan.	▪ No requirement for banks to set climate or nature targets nor disclose their transition plan.
CAPITAL REQUIREMENT	▪ Optional recommendation to include climate risk in ORSA-equivalent processes.	▪ No mandatory requirement for insurers to integrate C/E/S considerations in their ORSA, nor any capital requirements set.	▪ No mandatory requirement for insurers to integrate C/E/S considerations in their ORSA, nor any capital requirements set.
DISCLOSURE AGAINST TAXONOMY	▪ No requirement for insurers to disclose against a taxonomy.	▪ No requirement for insurers to disclose against a taxonomy.	▪ Proposed Turkish Green Taxonomy, but no mention of insurer-related taxonomy KPI.
MACRO-PRUDENTIAL SUPERVISION	▪ Following its 2024 system-wide Climate Risk Stress Test (CRST) for banks, the SARB has signaled its intention to extend climate risk stress testing to insurers. ▪ A smaller climate risk add-on was also included in the macroprudential stress test of insurers in 2023/24.	▪ Top-down climate stress test (2025) run by Bank of Korea with FSS covering major lenders and insurers.	▪ Mandatory earthquake insurance stipulated in the Catastrophe Insurance Law No. 6305, applicable to certain buildings meeting certain criteria.

G20 PROGRESS IN INSURANCE SUPERVISION ACROSS KEY POLICY LEVERS CONT.

	UK	USA
SUPERVISORY EXPECTATIONS	▪ Climate	▪ No single federal insurance supervisory expectation; insurance supervision is state-led. ▪ New York State Department of Financial Services (DFS) 2021 Guidance sets detailed expectations for insurers' management of climate-related financial risks. ▪ California has also issued climate-related supervisory expectations for insurers.
MATERIALITY SCOPE	▪ Financial materiality	▪ Financial materiality in California and New York state, no explicit mention at the federal level.
MACRO-PRUDENTIAL SUPERVISION	▪ The Bank of England has run two climate exercises including insurers: the 2019 Insurance Stress Test (first inclusion of a climate "exploratory exercise") and the 2021/22 Climate Biennial Exploratory Scenario (CBES) with aggregate results published in May 2022.	▪ Many states use the National Association of Insurance Commissioners (NAIC) Climate Risk Disclosure Survey (now TCFD-aligned) to collect insurer disclosures. ▪ The California Insurance Commissioner issues one-year moratoria on non-renewals/cancellations for homeowners in wildfire-emergency areas under SB 824. ▪ New York DFS published a 2021 analysis of insurers' transition-risk exposures. ▪ The National Flood Insurance Program (NFIP) nationally provides/backs primary flood insurance and sets floodplain standards. It is periodically reauthorized and materially shapes catastrophe risk coverage.
TARGET SETTING AND TRANSITION PLANNING	▪ TCFD-style disclosures are in force for large UK companies. ▪ The Government is consulting on mandating transition-plan disclosures aligned with the Transition Plan Taskforce's disclosure framework for financial institutions including insurers (ISSB-compatible).	▪ No national requirement for insurers to set climate or nature targets nor disclose their transition plan. ▪ Some states indirectly encourage it through TCFD reporting such as in New York with the DFS guidance.
CAPITAL REQUIREMENT	▪ No climate-specific capital charge ▪ Prudential Regulation Authority (PRA) expects material climate risks to be included in risk management and the ORSA.	▪ No federal climate-specific capital requirement. Exact prescriptions (if any) vary by state. ▪ State guidance like New York DFS (2021) expects integration of climate risk into enterprise risk management and ORSA.
DISCLOSURE AGAINST TAXONOMY	▪ No requirement for insurers to disclose against a taxonomy. Plans for a UK taxonomy were abandoned in July 2025.	▪ No requirement for insurers to disclose against a taxonomy.

MOST INSURANCE PRUDENTIAL FRAMEWORKS STILL LACK KEY ELEMENTS, INCLUDING ACTIVE CLIENT ENGAGEMENT AND DEDICATED SOLVENCY CAPITAL REQUIREMENTS

FIGURE 16: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS OF INSURANCE SUPERVISION



Note: The numbers displayed on the graph represent the average fulfilment of indicators. Where an indicator is split between investment and underwriting, both components are weighted equally. Partially met criteria are counted as 50% fulfilment, while fully met criteria are counted as 100%.

The UK Prudential Regulation Authority (PRA)'s 2025 Climate Change Adaptation Report sets out the latest review of firms' progress against SS3/19 (now CP10/25). *It finds that banks and insurers have taken positive steps in governance, risk management and climate scenario analysis, but that levels of readiness and embedding vary and further progress is needed by all firms. Governance structures for climate risks are now widely in place, yet consistent application across business lines, maturity of risk-management and scenario-analysis processes, and closure of critical data gaps remain key priorities. The PRA expects firms to show how climate risks are reflected in their ICAAPs/ORSAs and Expected Credit Loss (ECL) measurement, supported by prudent assumptions, proxies and evolving tools, and will continue to monitor progress and provide further updates.*

MICRO-PRUDENTIAL SUPERVISION, DISCLOSURES, IMPLEMENTATION

There is a growing global recognition of the importance of including sustainability within the strategies, business models, and risk management of insurers. In 2025, 70% of the assessed jurisdictions have integrated climate considerations, while 46% of the countries set supervisory expectations for insurers to integrate all three SUSREG aspects (climate, environment, and social) into their policies and processes.

Supervisors expect insurers to actively engage with their clients on climate, environment and social topics in only about a third of the jurisdictions surveyed. On a positive note, though, the integration of climate risk in insurance pricing is now required in more than 50% of the jurisdictions in our sample.

A dedicated calibration of capital requirements to incorporate climate and environmental risks remains rare (and is often limited to natural catastrophe insurance risk). A lack of sufficient data evidence is commonly cited by supervisors as the main reason. However, pioneering proposals exist, such as the European Insurance and Occupational Pensions Authority (EIOPA)'s recommendation to increase capital requirements for European insurers' investments in fossil fuels. The integration of climate and environmental considerations into Pillar 2 processes (ORSA) is also progressing in the more advanced jurisdictions.

The expectation for insurers to follow internationally recognized sustainability reporting frameworks when disclosing information is now more widespread, with many supervisors asking insurers to align their public disclosures with frameworks like the TCFD and ISBB. However, only about a third of the assessed insurance supervisors have published reports, on the progress of insurers in meeting their supervisory expectations on climate, with even lower achievement when considering environment and social factors.

A GROUNDBREAKING PROPOSAL FOR EUROPEAN INSURANCE: EIOPA'S RECOMMENDATION ON CAPITAL SURCHARGES FOR FOSSIL FUEL INVESTMENTS

In November 2024, the European Insurance and Occupational Pensions Authority (EIOPA) proposed a dedicated prudential treatment for insurers' fossil-fuel assets, arguing that transition risks are not adequately captured by current Solvency II calibrations. The final report recommends additive equity surcharges of up to 17% and multiplicative bond surcharges of up to 40%, calibrated to reflect the higher loss potential from abrupt policy shifts, technological substitution, litigation, and market repricing. The authority also reviewed non-life underwriting and social risks but did not yet propose capital measures in those areas due to data constraints. [1]

The proposal's core logic is strictly risk-based and micro prudential consideration. If an asset's transition risk profile is higher, the standard formula should require undertakings to hold more capital against it. That stance is consistent with global supervisory direction: the International Association of Insurance Supervisors (IAIS) has clarified that climate risk is a source of financial risk affecting both firm-level resilience and financial stability, and it encourages supervisors to embed scenario analysis and forward-looking risk management into prudential frameworks. While the IAIS paper does not set binding charges, it strengthens the case for risk-sensitive treatment where evidence of heightened exposure exists.[2]

Civil-society groups welcomed EIOPA's move and pressed the Commission to adopt it swiftly. In February 2025, 22 organizations and experts sent an open letter urging the new Financial Services Commissioner, Maria Luís Albuquerque, to translate EIOPA's advice into law arguing that undercapitalized fossil-fuel risk could threaten policyholders and ultimately taxpayers. The letter further mentioned that if transition risks related to fossil fuels are left underpriced, investment decisions of insurers will be distorted towards a high share of fossil fuels, leading to a growing risk of a disorderly transition and a growing physical risk of climate change.[3]

On the other side, some insurance industry stakeholders raised concerns about methodology, data gaps, and competitive disadvantages if the EU diverges from other jurisdictions. However, EIOPA's own impact assessment found that, because direct fossil exposures on European insurers' balance sheets are generally modest, the solvency-ratio effect would be limited, i.e., material for risk-sensitivity but not systemically destabilizing.

The European Commission formally adopted an amended Solvency II Delegated Regulation on 29 October 2025, which is now subject to the standard scrutiny period before entry into force.[4] The delegated act focuses on long-term equity and securitization investments, proportionality, reporting simplification and updated natural catastrophe parameters which better reflect physical climate risk. However, it does not yet incorporate EIOPA's proposed capital surcharges on insurers' fossil fuel assets. These proposals remain important, but they are non-binding pending any future Commission initiative to implement them.

[1] European Insurance and Occupational Pensions Authority. (2024). EIOPA recommends a dedicated prudential treatment for insurers' fossil fuel assets to cushion against transition risks.
[2] International Association of Insurance Supervisors. (2025). IAIS publishes comprehensive Application Paper on the supervision of climate-related risks in the insurance sector
[3] World Wide Fund for Nature. (2025). Open Letter to Commissioner Albuquerque on Solvency II.
[4] European Commission, (2025). Commission advances the Savings and Investments Union with measures to mobilise insurers' and banks' capital for Europe's future.

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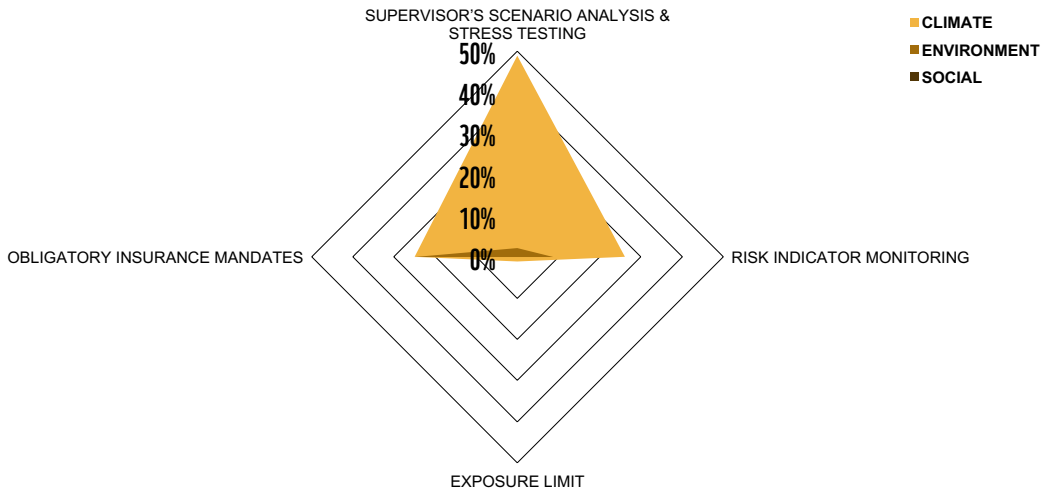
MACROPRUDENTIAL SUPERVISION IN INSURANCE REMAINS LARGELY FOCUSED ON CLIMATE STRESS TESTING, WITH OTHER TOOLS STILL LACKING

FIGURE 17: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS OF INSURANCE SUPERVISION



Note: The numbers displayed on the graph represent the average fulfilment of indicators. Where an indicator is split between investment and underwriting, both components are weighted equally. Partially met criteria are counted as 50% fulfilment, while fully met criteria are counted as 100%.

Philippine Crop Insurance Corporation (PCIC) implements the government's agricultural insurance program, providing insurance protection to farmers against losses arising from natural calamities, plant diseases and pest infestations affecting palay, corn and other crops. PCIC operates as a government-owned and controlled corporation under the supervision of *the Department of Agriculture as an attached agency. Crop insurance helps safeguard farm incomes and can also serve as "surrogate" collateral for banks and other financial institutions, encouraging them to continue participating in and supporting government credit programs. By reducing farmers' exposure to shocks, the program is intended to strengthen financial inclusion and rural resilience, lessen dependence on post-disaster aid and support more stable agricultural credit markets.*

MACRO-PRUDENTIAL SUPERVISION

Macroprudential measures in insurance supervision remain underdeveloped. Macroprudential tools here refer to elements like systemic capital buffers, system-wide stress testing, sectoral risk monitoring, exposure/concentration limits, and mandatory insurance. These measures are particularly significant in the supervisory ecosystem, as they provide an in-depth understanding of the key risks and stressors the financial system faces, as well as offering mechanisms to manage and mitigate such systemic risks.

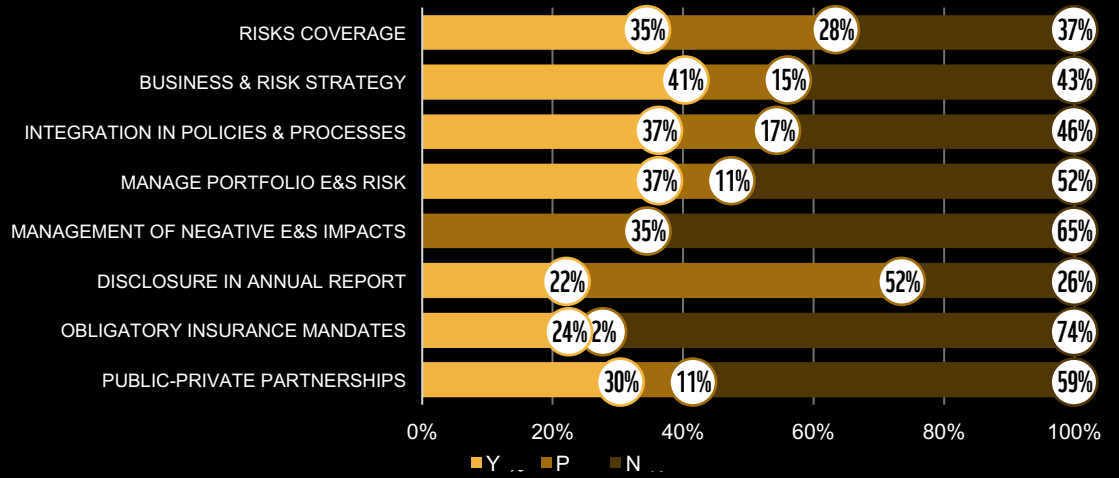
About half of the surveyed insurance supervisors worldwide have now run system-wide climate scenario analyses or stress tests. The most advanced of these exercises have started to integrate considerations such as coverage insurability and affordability, as seen in France and Australia. A quarter of the jurisdictions in our sample have also developed climate risk indicators monitoring. However, the inclusion of broader environmental and social factors remains very limited given data, methodology, and modelling gaps.

No insurance supervisor has yet issued prudential rules to limit the exposure of insurers to certain activities in order to prevent and protect against the build-up of systemic risk, based on environmental and social considerations. This remains a blind spot of insurance supervision, although the state of New York has made groundbreaking proposal with its Insure Our Communities Act which, if adopted, would prohibit investments and insurance underwriting for fossil fuel projects (see page 63 for more details).

About a quarter of the countries surveyed have some form of mandatory insurance against climate and other natural disasters (e.g. earthquakes), typically tailored to the specific hazards they face and their local political context. In the context of widening insurance protection gaps, interest in such schemes is growing, illustrated by the introduction of mandatory natural-catastrophe insurance for companies in Italy this year and ongoing proposals in Germany. However, if underlying risks are not addressed (for example through prevention, land-use planning, etc), these mandatory schemes can create problems for insurance markets by concentrating high risks and undermining long-term insurability.

WHILE MANY REGULATIONS MENTION THE SOCIAL DIMENSION OF INSURANCE, PRACTICAL MEASURES TO ASSESS AND MANAGE ASSOCIATED RISKS AND IMPACTS REMAIN SCARCE

FIGURE 18: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT SOCIAL-RELATED INSURANCE SUPERVISION INDICATORS



Note: The numbers displayed in the graph represent the percentage of countries in the SUSREG scope that do not meet (N), partially meet (P), and fully meet (Y) the SUSREG criteria on the respective indicators.

The Indian government is holding early-stage discussions with local insurers on a nationwide climate-linked insurance program to simplify payouts after extreme weather events such as heatwaves and floods. *The scheme would use a parametric insurance model, providing pre-set payouts when weather thresholds for rainfall, temperature or windspeed are breached, allowing much faster payments than traditional loss-based insurance and helping shift more risk to insurers instead of disaster funds. Federal officials are backing the idea, and the finance ministry, National Disaster Management Authority, GIC Re and other major insurers are exploring coverage options and funding, though no formal proposal has yet been issued.*

Insurance plays an essential social role by nature through its business model which provides financial safety nets for society at large via risk pooling and cost sharing. This enables households, small businesses, and communities to withstand shocks that could otherwise lead to poverty and long-term financial instability. In many instances where public safety nets are limited, insurance acts as one of the rare instruments that can provide resilience and stability, reducing vulnerability to economic and social turmoil.

However, considerable protection gaps persist in many countries. In some cases, these gaps are widening, amid rapidly escalating climate-related hazards and environmental threats. Highly vulnerable populations remain uninsured or underinsured, leaving them exposed to risks that could otherwise be mitigated through affordable and accessible insurance solutions, including public-private partnerships between governments and insurers. Such collaborations exist in only 41% of the assessed jurisdictions. Ensuring that insurers do not exclude these risks or price them beyond customers' reach is essential to fulfilling the sector's social role. Without a clear strategy and regulatory support to expand coverage, such as mandatory insurance schemes or strengthened public-private partnerships, protection gaps may deepen social inequality rather than reduce it.

Addressing these gaps requires progress on both climate mitigation, reducing emissions and environmental degradation that amplify climate-related hazards and climate adaptation, including broader and more affordable insurance coverage against physical risks. Advancing both dimensions together is essential to strengthen resilience, particularly for the communities most exposed to climate and environmental impacts.[1]

The insurance sector can shape social outcomes by affecting business behaviors and setting standards for responsible practices. Through underwriting and investment decisions, insurers can deter detrimental practices like labor exploitation or human rights violations, while incentivizing companies that showcase equitable treatment and moral behavior. 61% of the assessed jurisdictions have included social risks as part of the supervisory expectations.

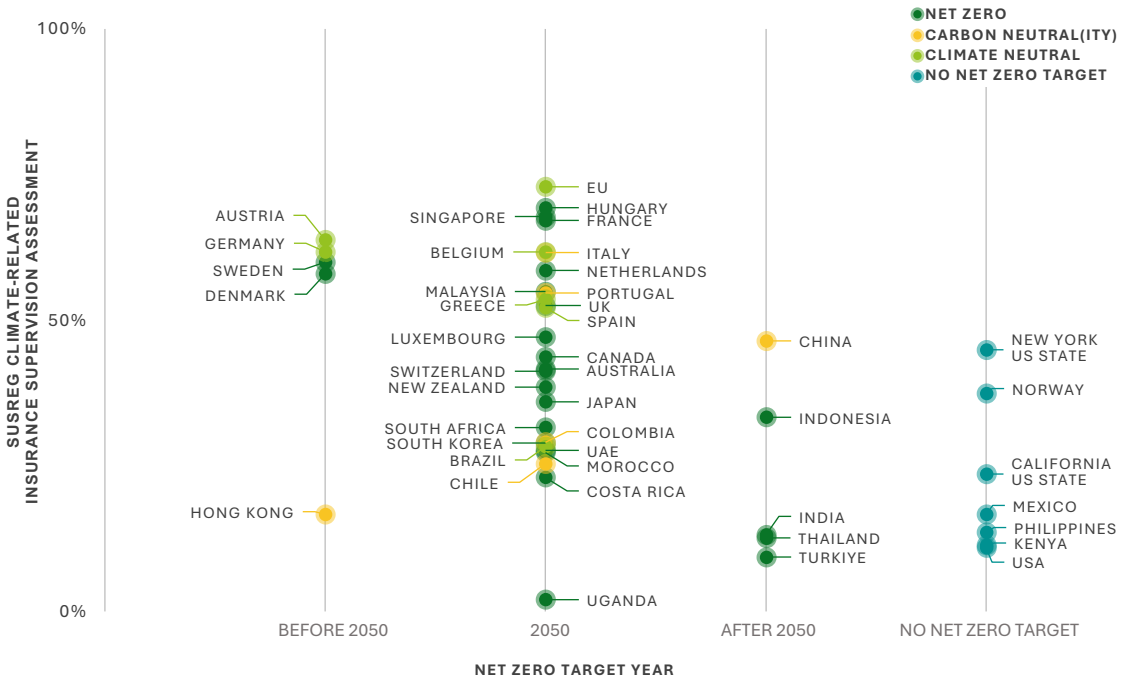
Although an increasing number of supervisors recognize the importance of incorporating the social aspect into insurance governance, strategy, risk management, business processes, and disclosures (with 56% of regulators requiring it), in reality, social factors frequently take a back seat to financial or climate risks in supervisory requirements. A significant obstacle to advancement is the absence of standardized methods and dependable data for evaluating social risks and consequences. In contrast to financial or climate-related risks and effects, social issues lack universally accepted metrics and assessment frameworks (like GHG accounting and scenario analysis).

The narrow inclusion of social issues in regulatory expectations reduces the insurance industry's capacity to promote social advancement. Enhancing the social function of insurance necessitates bridging protection gaps, creating inclusive offerings, and promoting uniform methods for evaluating social risks and effects. These are all domains where insurance regulators have a significant responsibility to incentivize insurers to align their fundamental operations with greater societal resilience and fairness.

[1] World Wide Fund for Nature. (2025). Tackling The Insurance Protection Gap.

OVER HALF OF THE JURISDICTIONS WITH NET-ZERO TARGETS HAVE WEAK CLIMATE INSURANCE SUPERVISION, ALIGNING WITH LESS THAN 50% OF SUSREG CRITERIA

FIGURE 19: CLIMATE-RELATED INSURANCE SUPERVISION SCORE & COUNTRIES NET ZERO COMMITMENT



Source of countries' net zero target: Net Zero Tracker (2024) and internal verification conducted by the authors.
Note: Although Norway has not formally adopted a net-zero target, the country has established a goal to reduce its greenhouse gas emissions by 90 to 95 percent by the year 2050, compared to emission levels in the reference year 1990.

Despite recent setbacks and delays in global climate policies (including the United States leaving the Paris Agreements in 2025 for the second time), most countries remain formally committed to achieving net-zero targets.

Financial supervisors do not set national climate targets themselves, but they have a key role in embedding climate-related risks into financial regulations to ensure that the financial system is contributing to the national target set by the government.

By setting proportionate expectations for credible transition plans and linking them to sustainability risk management requirements, their promotion of climate transition within insurance supervision can encourage robust implementation.

The global policy discussion on climate and insurance is currently shifting toward climate adaptation, resilience, and protection gaps, yet insurers' active participation to climate mitigation and net-zero efforts remains essential. Insurers influence the real-world economy and climate outcomes through their investment and underwriting choices.

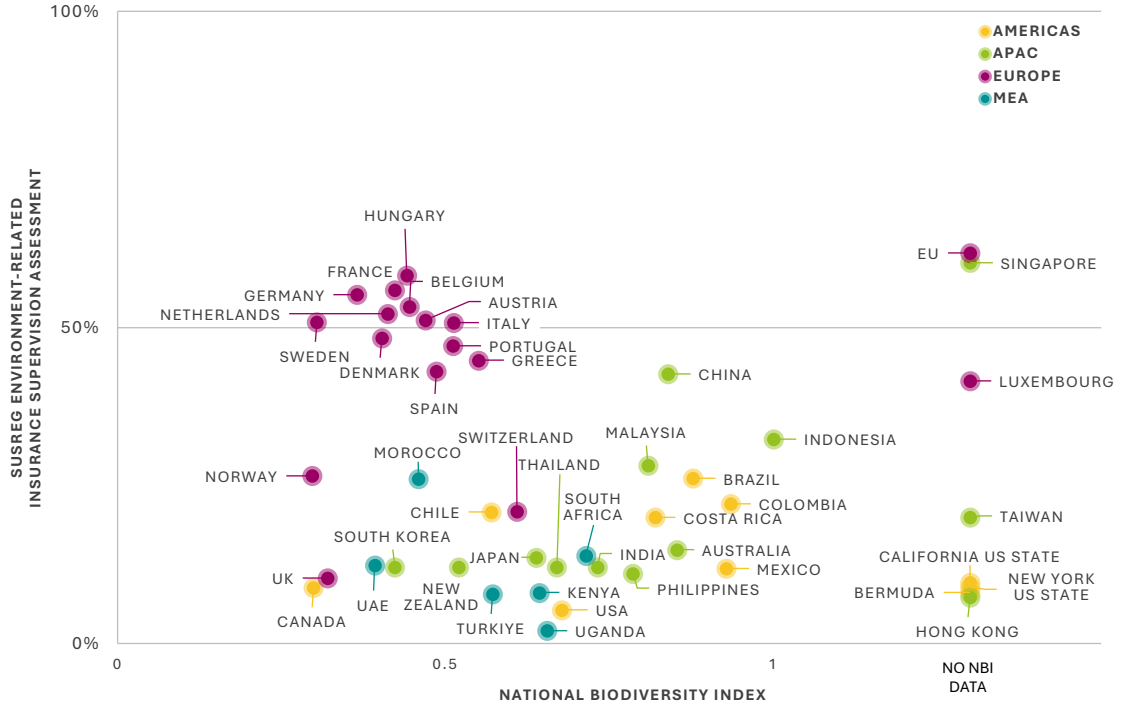
A closer look at the latest SUSREG assessment reveals that significant opportunities for improvement persist. More than half of the countries with a net zero target still lack a comprehensive climate-related insurance supervision (i.e. they show less than 50% alignment with the SUSREG climate criteria).

Despite regulatory uncertainties such as the Omnibus proposal, which is expected to narrow scope and defer reporting timelines, European countries continue to perform the strongest in climate insurance supervision, alongside Singapore and Malaysia.

The Monetary Authority of Singapore (MAS) continues to advance climate-related insurance supervision in 2025, building on its 2020 Environmental Risk Management Guidelines for Insurers. *According to MAS's Sustainability Report 2024/2025, new priorities include conducting climate scenario analyses with major insurers to assess combined physical and macro-financial risks as well as evaluating the implementation of ISSB-aligned disclosure standards for Singapore-listed entities from FY2025. MAS will also explore the adoption of the BCBS Taskforce's voluntary climate risk disclosure framework and review sector-specific supervisory requirements for insurers.*

INSURANCE SUPERVISION ON NATURE-RELATED RISKS LAGS, PARTICULARLY IN COUNTRIES WITH THE RICHEST BIODIVERSITY.

FIGURE 20: ENVIRONMENT-RELATED INSURANCE SUPERVISION SCORE & NATIONAL BIODIVERSITY INDEX



Source of National Biodiversity Index: Convention on Biological Diversity (CBD).
Note: The National Biodiversity Index (NBI) is based on estimates of country richness and endemism in four terrestrial vertebrate classes and vascular plants; vertebrates and plants are ranked equally; index values range between 1.000 (maximum: Indonesia) and 0.000 (minimum: Greenland, not shown in table). The NBI includes some adjustment allowing for country size.

[1] Network for Greening the Financial System. (2023) Nature-related Financial Risks: a Conceptual Framework to guide Action by Central Banks and Supervisors.
[2] UNEP-FI PSI. (2024). Insuring a resilient nature-positive future: Global guide for insurers on setting priority actions for nature.
[3] UNEP-FI PSI. (2025). Rooted in Risk: Framing nature-related assessments for insurers.
[4] World Wide Fund for Nature. (2023). Underwriting Our Planet: How Insurers Can Help Address the Crises in Climate and Biodiversity.

With climate supervision maturing, financial regulators are beginning to widen their scope to nature-related risks, consistent with the NGFS's framing of nature as the overarching system of which climate is a component, and its call to integrate climate and broader nature risks rather than treat them in isolation.[1]

Yet insurance supervision on nature still lags globally. In the 2025 SUSREG assessment, more than three-quarters of the jurisdictions surveyed score below 50% on environmental criteria, reflecting multiple gaps in governance and risk appetite, location-based exposure metrics, sector standards for high-impact activities, and pilot extensions of climate scenarios to incorporate nature. In regions like Latin America, Asia-Pacific and Africa, high biodiversity is often paired with lagging insurance supervision on nature-related risks and impacts.

As ecosystems continue to degrade, insurers face mounting financial risks, particularly through their investments and underwriting portfolios in countries rich in natural resources and biodiversity. Nature loss not only increases the likelihood and severity of natural disasters due to the destruction of ecosystem buffers but also threatens the sustainability of industries dependent on natural resources, thereby increasing the risk of financial losses for insurers.

Supervisors can set proportionate expectations that insurers use TNFD's LEAP (Locate, Evaluate, Assess, Prepare) methodology to identify material nature exposures, align disclosures to interoperable frameworks, and show how findings feed into strategy, risk management, pricing and underwriting.

The UN Environment Programme's Principles for Sustainable Insurance (PSI) launched a global guide to help insurers set priority actions for nature, alongside the first in a series of guidance documents addressing nature-related dependencies, impacts, risks, and opportunities in underwriting portfolios[2][3]. Separately, WWF's *Underwriting Our Planet* report outlines how insurers can strengthen their approach to biodiversity across underwriting, investment, and engagement.[4]

The European Insurance and Occupational Pensions Authority (EIOPA) Supervisory Report on Practices and Challenges on Biodiversity Risks (2025) fulfills a new mandate under Article 304(c)(3) of Directive (EU) 2025/2, requiring EIOPA to assess how insurers evaluate their material exposure to biodiversity-related risks and to report its findings to the European Commission by June 2025. *The report highlights key challenges insurers face in managing biodiversity risks, ranging from limited capacity to identify and measure these risks (due to data constraints) to the complex, location-specific nature of biodiversity and its interlinkages with other environmental risks, including climate change. Looking ahead, EIOPA sees merit in building supervisory capacity and fostering collaboration on data, modelling, and scenario development to better address nature-related risks.*

CAPITAL MARKETS

EXECUTIVE SUMMARY OF THE 2025 CAPITAL MARKETS ASSESSMENT

NOTABLE DEVELOPMENTS IN 2025

This section explores how capital markets regulators and supervisors are responding to climate, environmental, and social risks in a manner consistent with their mandates to ensure market integrity, investor protection, and financial stability. It considers the range of regulatory and supervisory actions that can embed ESG risk factors into asset management, issuer oversight, and market infrastructure, thereby strengthening the resilience and transparency of capital markets. Furthermore, it highlights the proactive role authorities are playing in advancing sustainable finance. Global capital markets regulators are taking divergent but concerted steps to embed sustainability in the regulation of capital market participants.

- **Australia**: The Australian Securities and Investments Commission (ASIC) published Regulatory Guide RG 280 Sustainability reporting in March 2025, setting expectations for climate and sustainability reporting and related financial disclosures, clarifying governance and oversight responsibilities, and signaling a stronger focus on enforcement against misleading sustainability information to protect investors.
- **EU**: The EU has stepped up coordinated rulemaking and supervision led by the European Securities and Markets Authority (ESMA)'s Guidelines on the Enforcement of Sustainability-related Information (GLESI) and thematic notes on "clear, fair and not misleading" claims. In addition, ESMA published technical standards under the European Green Bond Regulation (EuGB) and has launched consultations and published draft regulatory technical standards under the recently adopted ESG Ratings Regulation.
- **France**: The Autorité des Marchés Financiers (AMF) amended DOC-2020-03 in January 2025 following its decision to comply with ESMA's Guidelines on fund names using ESG or sustainability-related terms.
- **India**: In April 2025, the International Financial Services Centres Authority (IFSCA) published a consultation paper proposing a Framework for Transition Bonds. This framework defines eligibility criteria, disclosure requirements, and safeguards to prevent greenwashing in ESG bond issuance.
- **Japan**: The Sustainability Standard Board of Japan (SSBJ) issued Japan's first sustainability disclosure standards (Mar 2025), incorporating key elements of the ISSB's IFRS S1 and S2 standards.
- **United Kingdom**: The Financial Conduct Authority (FCA) implemented its Sustainability Disclosure Requirements (SDR) and investment labels regime via Policy Statement PS23/16 (published November 2023, with implementation phased in from 2024), deploying an anti-greenwashing rule and four sustainability labels (Sustainability Focus, Improvers, Impact, Mixed Goals).
- **USA**: Recent developments include the US Securities and Exchange Commission (SEC)'s climate disclosure rule facing ongoing legal challenges and, in 2025, a Commission vote to stop defending the rule in court. The Commission has also taken a more cautious approach to new ESG-focused disclosure mandates for advisers and funds and disbanded the SEC's ESG enforcement taskforce. There are growing signs that ESG issues are now being treated as part of broader enforcement themes rather than a standalone priority.

WHAT TO EXPECT IN THIS SECTION?

The following section will examine the regulatory and supervisory practices shaping the sustainable finance landscape within capital markets, focusing on twelve influential jurisdictions. It provides a comprehensive overview of how capital markets are supporting the transition to a low-carbon and nature-positive economy, highlighting both strengths and gaps, regional differences, and emerging best practices. This section also features in-depth explorations into two areas of notable practices: India's leadership in regulating ESG rating providers within the APAC region, and Australia's best practice approach to greenwashing enforcement.

For asset management supervision, indicators focus on the integration of sustainability into investment processes and policies, portfolio alignment with taxonomies, sustainability governance requirements (including remuneration practices), requirements for pre-contractual and periodic sustainability disclosures, target setting and transition plan disclosures, as well as the existence and enforcement of fund naming rules.

For issuer supervision, the key indicators evaluated include the existence of mandatory sustainability bond frameworks, with particular attention to the use of proceeds and the quality and transparency of impact reporting. For listed issuers, key indicators assessed include sustainability reporting obligations, double materiality assessment requirements, external assurance of disclosures, taxonomy reporting, due diligence, target setting, and transition plan disclosures.

For market infrastructure, the assessment covers regulations governing carbon markets, ESG ratings and ESG benchmarks, as well as the enforcement on greenwashing.

CAPITAL MARKETS INDICATORS

ASSET MANAGEMENT SUPERVISION		ISSUER SUPERVISION		MARKET INFRASTRUCTURE		
1.1	1.2	2.1	2.2	3.1	3.2	3.3
ENTITY LEVEL	PRODUCT LEVEL	LISTED BONDS	LISTED EQUITIES	CARBON MARKETS	ESG RATINGS 6 BENCHMARKS	MONITORING & ENFORCEMENT
Double materiality	Fund naming rules	Green, social, and sustainable bond framework	Sustainability reporting	Carbon market	ESG benchmarks	Enforcement actions related to greenwashing and sustainability misconduct
Sustainability integration into processes and policies	Sustainability in pre-contractual disclosures	Report on use of use of proceeds	Double materiality		ESG ratings	
Sustainability governance	Product periodic disclosures	Impact reporting	External assurance requirement			
Sustainability-related remuneration		Third-party verification	Taxonomy reporting			
Portfolio alignment with Taxonomy			Due diligence			
Asset manager's target setting			Target setting			
Asset manager's transition plan			Transition plan			

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The UK Financial Conduct Authority (FCA) has moved beyond soft guidance to a binding regime: SDR & investment labels (PS23/16) set labels, naming/marketing restrictions, and product and entity-level disclosures for UK asset managers, *with distributors required to pass label information to consumers. Alongside this, an economy-wide anti-greenwashing rule, with guidance FG24/3, applies to any sustainability claim made by authorized firms (in force since May 2024). To smooth implementation, the FCA granted temporary flexibility on the SDR naming/marketing rules until 2 Apr 2025, while pausing the planned extension to portfolio/wealth management pending further work. On the issuer side, the government is developing UK Sustainability Reporting Standards to operationalize IFRS S1/S2.*

Brazil's unified fund rule, CVM Resolution 175, replaces ICVM 555 and other legacy norms and sets the framework for fund constitution, operation, disclosure and service-provider duties. *While it does not set climate targets, it regulates ESG, green, and sustainability claims. Article 49 requires any fund using expressions such as "ESG/ASG/ambiental/verde/social/sustentável" in its name to disclose the ESG benefits it aims to deliver, the methodologies and criteria used, and any independent certification obtained. In Annex VI (FIAGRO), the rule recognises agribusiness carbon credits and, for funds whose denomination includes the term "carbono", the regulation requires the fund' to explain how its investment policy contributes to greenhouse-gas reduction or removal.*

The Monetary Authority of Singapore (MAS) couples supervisory expectations with targeted product rules and an exchange-led reporting roadmap*. Guidelines on Environmental Risk Management (December 2020) set expectations on risk governance, portfolio risk management and disclosures for asset managers. MAS also set Disclosure & Reporting Guidelines for Retail ESG Funds (Circular CFC 02/2022), effective in January 2023, and followed up with an Information Paper on good disclosure practices (4 December 2024) to curb greenwashing in fund names, strategies, metrics and stewardship claims. On the issuer side, ACRA & SGX RegCo are implementing an ISSB-aligned climate-reporting and assurance roadmap for listed and large non-listed companies, with timelines extended on 25 August 2025 to support capability-building. SGX RegCo had already signaled incorporation of IFRS S1/S2 from FY2025 reporting. Separately, Singapore has issued anti-greenwashing guidance for corporate marketing claims via the consumer-protection authority.*

REGIONAL OVERVIEW

The 2025 capital markets assessment shows that sustainability regulations across capital markets continue to vary by region and country.

Europe remains the frontrunner, with France particularly going beyond the EU regulations on SFDR. The AMF has aligned fund-naming rules with ESMA's ESG names guidance (including the "80%" threshold and limits on transition terms) and updated its doctrine accordingly. It has also started enforcing against misleading sustainability communications through supervisory actions and settlements (e.g., Primonial REIM, €40,000). However, at the EU level, the proposed "Omnibus" amendments to the CSRD/ESRS could narrow the scope and delay key reporting elements, potentially softening the EU's current leadership position if enacted. In the **UK**, the FCA's Sustainability Disclosure Requirements introduce an economy-wide anti-greenwashing rule as well as naming and marketing rules for asset managers.

In APAC, **Singapore** leads via MAS Environmental Risk Management Guidelines for asset managers and disclosure/reporting rules for retail ESG funds. India has strengthened its green bond framework and introduced a full regulatory regime for ESG Rating Providers. Australia combines active greenwashing enforcement with a new mandatory climate-related financial reporting regime, supported by ASIC Regulatory Guide 280.

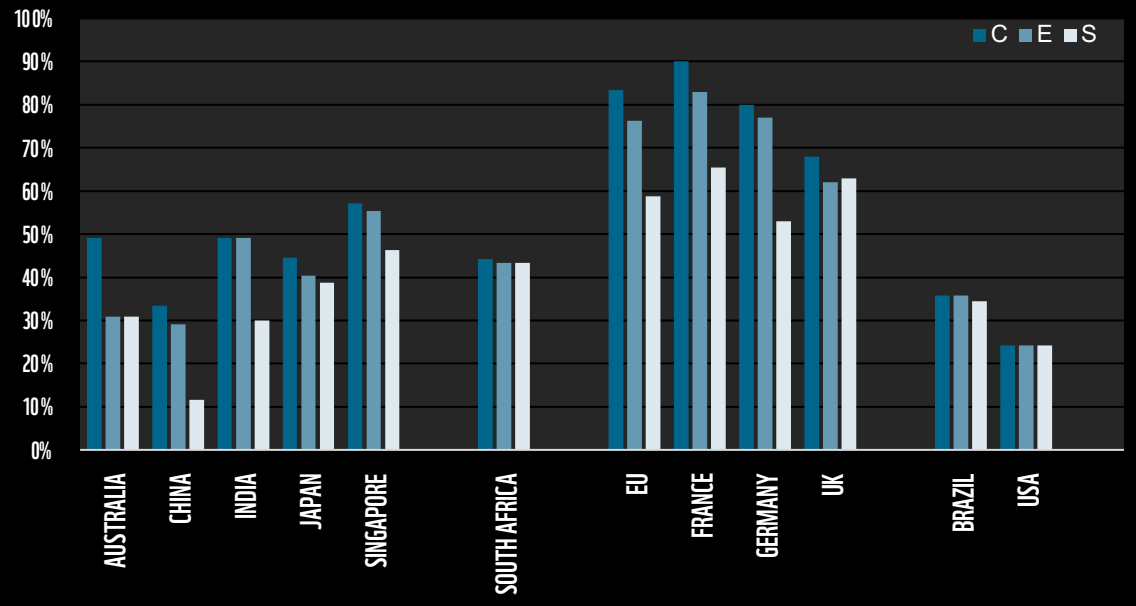
In Africa**, South Africa** shows measured progress. The JSE's Sustainability & Climate Disclosure Guidance aligns issuers with global standards and is being updated for IFRS S1/S2, while the FSCA's sustainable-finance program (2023–25) signals movement toward future mandatory disclosures.

In the **Americas**, **Brazil** demonstrates clear regulatory momentum. CVM Resolution 175 unified fund rule while Resolution 193 mandates ISSB-aligned sustainability reporting for public companies beginning in 2026. The **United States**, by contrast, remains less aligned with the SUSREG framework. Although the Securities and Exchange Commission (SEC) strengthened its fund names rule to address misleading ESG fund names, its climate disclosure rule remains on hold amid ongoing litigation.

[1] France Ministry for the Economy and Finance. (2025). Mobilizing savings for the benefit of the ecological transition: the green finance label "Greenfin" celebrates its tenth anniversary in 2025 and evolves with the times.

WWF

FIGURE 21: AVERAGE FULFILMENT OF SUSREG CAPITAL MARKET INDICATORS BY TOPIC & COUNTRIES IN 2025



France goes beyond EU minimum rules by combining binding rules with stringent voluntary labels and enhanced investor disclosures expectations. *The AMF's ESG naming doctrine (DOC-2020-03), updated in January 2025 to implement ESMA's fund-names guidance, governs how any fund marketed in France may use ESG terms in its name, key information documents, and marketing. Additionaly, the annual AMF-ACPR report (e.g., June 2024) reviews climate commitments by asset managers, banks, and insurers to check claims against their actual actions.*

To complement this regulatory backbone, France also supports voluntary state-backed green-finance labels. The Greenfin label (updated in January 2025) now excludes companies developing new fossil projects and applies strict exclusion thresholds across the fossil value chain. The ISR label also excludes companies developing new fossil projects and tightens expectations for transition plans. As of January 2025, the French environment ministry reported 108 Greenfin-labelled funds with about €35 billion Asset Under Manangement (AUM)[1].

AVERAGE FULFILLMENT OF INDICATORS ACROSS THE 12 JURISDICTIONS IN THE SAMPLE

ASSET MANAGEMENT SUPERVISION		ISSUER SUPERVISION		MARKET INFRASTRUCTRURE		
1.1	1.2	2.1	2.2	3.1	3.2	3.3
ENTITY LEVEL	PRODUCT LEVEL	LISTED BONDS	LISTED EQUITIES	CARBON MARKETS	ESG RATINGS 6 BENCHMARKS	MONITORING & ENFORCEMENT
Double materiality **56%**	Fund naming rules **71%**	Green, social, and sustainable bond framework 50%	Sustainability reporting 69%	Carbon market 67%	ESG benchmarks 23%	Enforcement actions related to greenwashing and sustainability misconduct 58%
Sustainability integration into processes and policies 67%	Sustainability in pre-contractual disclosures 71%	Report on use of use of proceeds 50%	Double materiality 52%		ESG ratings 46%	
Sustainability governance 54%	Product periodic disclosures 71%	Impact reporting 42%	External assurance requirement 48%			
Sustainability-related remuneration 31%		Third-party verification 50%	Taxonomy reporting 29%			
Portfolio alignment with Taxonomy 25%			Due diligence 23%			
Asset manager's target setting 33%			Target setting 48%			
Asset manager's transition plan 27%			Transition plan 33%			

Note: The number displayed on the graph represents the average fulfillment of indicators for climate and environment. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

The assessment of supervision practices across asset management, issuer supervision, and market infrastructure shows differing emphases on sustainability within capital markets regulation, but clear anchors where regulation is most developed.

Supervision of asset management increasingly emphasizes product-level requirements, with Europe and the UK leading. The EU's Sustainable Finance Disclosure Regulation (SFDR) and ESMA's final Guidelines on fund names using ESG/sustainability terms (80% threshold, exclusions) now shape EU members' national approaches. The UK's FCA has introduced the Sustainability Disclosure Requirements (SDR) with investment labels, naming rules, and an economy-wide anti-greenwashing standard. In Asia, the Monetary Authority of Singapore (MAS) issued Environmental Risk Management (ERM) Guidelines for Asset Managers embedding governance/risk processes (December 2020). Across regions, supervisors are gradually extending oversight from product disclosure to entity-level governance (reinforced in Europe by the EU Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS) but sustainability-linked remuneration and taxonomy-based portfolio alignment remain nascent.

For listed bonds, Green, Social, and Sustainability (GSS) bond frameworks are mandatory only in very few jurisdictions, with statutory examples such as The Securities and Exchange Board of India (SEBI)'s Green Debt Securities rules under the Non-Convertible Securities (NCS) framework (India). In most other markets, GSS issuance remains voluntary, allowing participants to rely on market-based standards such as the ICMA Green, Social, Sustainability, and Sustainability-Linked Bond Principles.

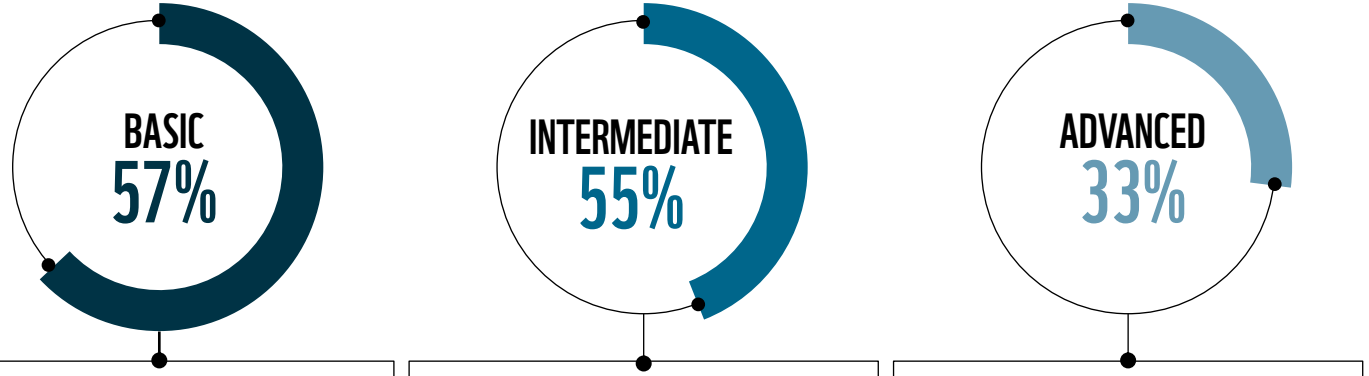
For listed equities, sustainability reporting is comparatively advanced, driven by the EU CSRD/ESRS, Brazil's CVM Resolution 193 (mandating ISSB-aligned disclosure from 2026), UK premium-listing rules transitioning to IFRS S2, and the Singapore Exchange (SGX) climate-reporting roadmap. Limited assurance is emerging under the CSRD, but issuer-level taxonomy alignment, corporate due-diligence obligations (beyond the EU CSDDD), and transition-plan disclosures (such as the UK's TPT framework) remain in early stages of implementation with most jurisdictions adopting these measures voluntarily.

As for Market Infrastructure, carbon markets show some advances in many regions particularly through the EU Emissions Trading System (ETS) (Phase IV), the expanding UK ETS, and the EU Carbon Border Adjustment Mechanism (CBAM). Regulation of ESG "gatekeepers" is advancing more rapidly for ESG rating providers for example, SEBI's ESG Rating Providers (ERP) framework (India) and the forthcoming EU ESG Ratings Regulation than for ESG benchmarks, which remain governed largely by the EU Benchmarks Regulation (Climate Transition Benchmark/Paris-aligned Benchmark) with limited replication elsewhere. Enforcement of greenwashing and sustainability misconduct is also increasing, illustrated by actions from the AMF (supervisory reviews and settlements), DGCCRF (misleading "carbon-neutral" claims), the UK FCA (anti-greenwashing rule), and ASIC (litigation and RG 280 on sustainability-related disclosure).

Disclosure and naming/marketing controls are maturing (ESMA guidelines, SDR, SFDR, CSRD/ISSB), but taxonomy-based portfolio alignment, issuer transition plans, due-diligence duties, and ESG-benchmark oversight remain the next frontiers for supervisory development.

WHILE BASIC INDICATORS SHOW MODERATE ACHIEVEMENT (57%), THE LIMITED PROGRESS IN ADVANCED INDICATORS (33%) HIGHLIGHTS THE COMPLEXITY OF REGULATING CAPITAL MARKETS

FIGURE 22: AVERAGE ACHIEVEMENT OF CLIMATE AND ENVIRONMENT CAPITAL-MARKET INDICATORS IN ASSESSED JURISDICTIONS BY CATEGORY



BASIC

ASSET MANAGER SUPERVISION
- Sustainability integration into processes and policies
- Sustainability governance
- Sustainability-related remuneration
- Sustainability in pre-contractual disclosures

LISTED EQUITIES
- Sustainability reporting

INTERMEDIATE

ASSET MANAGER SUPERVISION
- Double materiality for asset managers
- Fund naming rules
- Product periodic disclosures

LISTED BONDS
- Green, social, and sustainable bond framework
- Report on use of use of proceeds
- Third-party verification

LISTED EQUITIES
- Double materiality for corporates
- External assurance requirement

MARKET INFRASTRUCTURE
- Carbon market
- Enforcement actions related to greenwashing and sustainability misconduct

ADVANCED

ASSET MANAGER SUPERVISION
- Portfolio alignment with Taxonomy
- Asset manager's target setting
- Asset manager's transition plan

LISTED BONDS
- Impact reporting

LISTED EQUITIES
- Taxonomy reporting
- Due diligence
- Target setting
- Transition plan

MARKET INFRASTRUCTURE
- ESG benchmarks
- ESG ratings

Note: The number displayed on the graph represents the average fulfillment of indicators for the climate and environmental assessment. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

The SUSREG indicators are grouped into three categories according to their perceived level of complexity: Basic, Intermediate, and Advanced. The definitions of these categories, and the expectations for how supervisors should progressively improve their fulfilment of more advanced indicators, are set out on page 23.

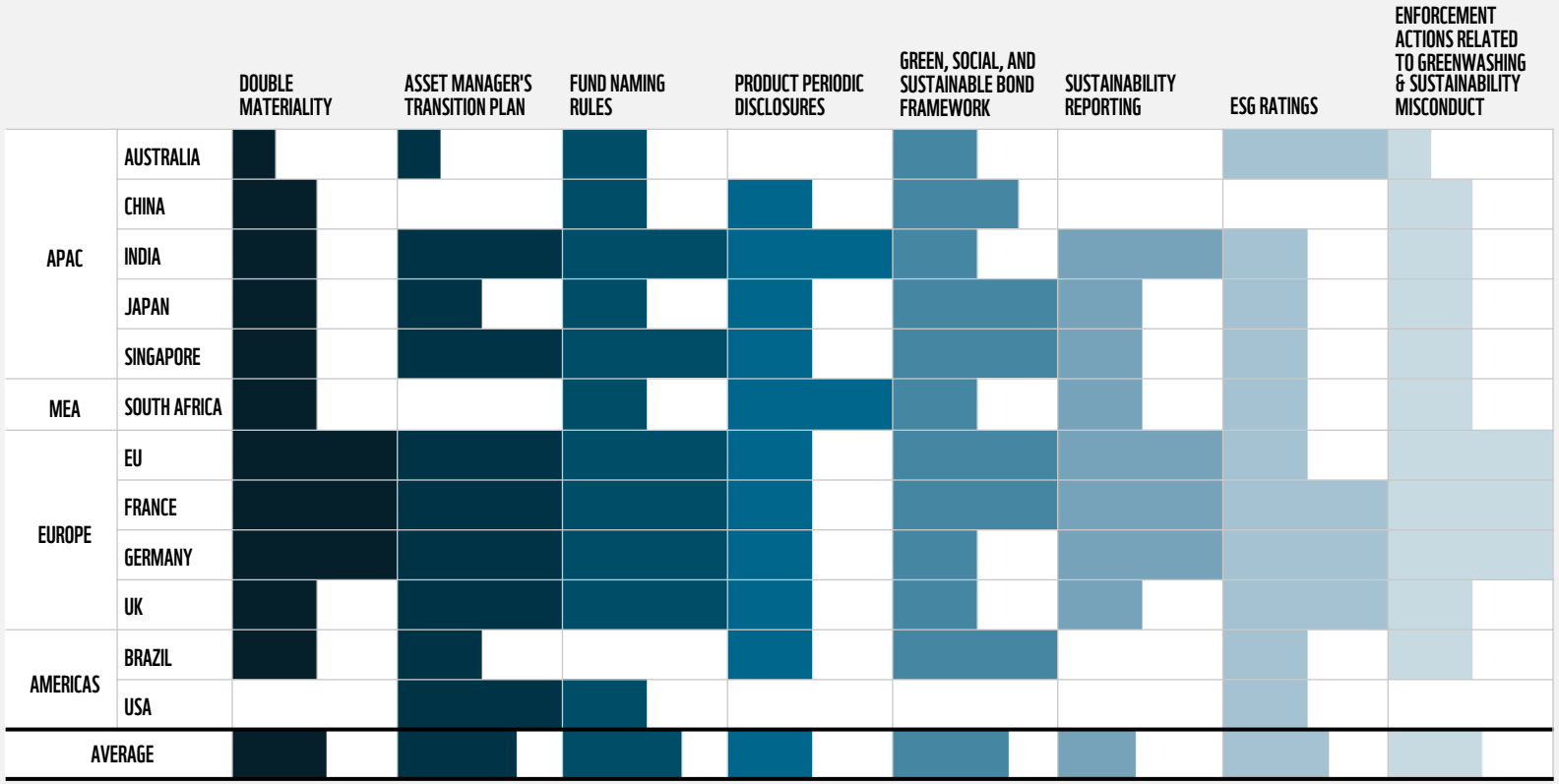
On average, 57% of Basic indicators have been achieved by the pilot countries. This category includes asset-management indicators such as the integration of sustainability into processes and policies, sustainability-related governance and remuneration, and sustainability information in pre-contractual disclosures. Within this group, expectations to provide sustainability-related information in pre-contractual disclosures are the most advanced, whereas regulatory requirements to integrate climate, environmental, and social (C/E/S) considerations into remuneration practices remain the least developed, as they represent a deeper level of sustainability integration.

Intermediate indicators show a slightly lower level of achievement, at 55% on average. Fund naming rules and greenwashing enforcement record the highest fulfilment across the assessed countries. By contrast, external assurance requirements for listed equities remain largely unaddressed. This may reflect regulatory immaturity in some jurisdictions, as well as the absence of common international assurance standards and methodological gaps that still hinder the feasibility of mandatory assurance.

On average, only around one third of the Advanced indicators are fulfilled. The most developed among these are regulations on ESG rating providers, followed by impact reporting for sustainable bonds. Overall, the lower rate of fulfilment at this level highlights the hurdles in addressing more complex issues (particularly taxonomy-based reporting, target setting, and transition plans) indicating that these remain challenging regulatory topics for many authorities.

ASSESSMENT OF KEY INDICATORS FULFILLMENT FOR CLIMATE AND ENVIRONMENT ACROSS COUNTRIES

FIGURE 23: SUSREG CAPITAL MARKETS SELECT INDICATORS ACROSS 12 COUNTRIES FOR CLIMATE AND ENVIRONMENT ASPECTS



Note: The bars in the graph represent the average fulfilment of indicators within the climate and environment scope. Climate and nature components are weighted equally. Partially met criteria are counted as 50% fulfilment, while fully met criteria are counted as 100%. For a bar to appear fully met (a full bar), the indicator must be fully achieved for both the climate and nature dimensions.

[1] International Institute for Sustainable Development; Climate Bonds Initiative. (2015). Chapter 10: Greening China's Bond Market (in Greening China's financial system).
[2] Green Finance & Development Centre. (2025). China green finance status and trends 2024-2025.

The comparative overview of selected key indicators reveals marked differences across regions and pilot countries.

Fund naming rules and sustainability reporting show the highest degree of implementation and can be considered baseline regulatory requirements. The United States and Australia lag behind, reflecting a stronger reliance on voluntary or principle-based approaches and generally less prescriptive frameworks than in Europe.

By contrast, requirements for asset managers' transition-plan disclosures show the weakest implementation. In many jurisdictions, even voluntary disclosure of such plans is not encouraged. Persistent methodological gaps and regulatory complexity around Scope 3 emissions continue to hinder robust measurement, so transition plans remain largely non-mandatory.

The United States and China stand out as the furthest from full alignment with the indicators, albeit for different reasons. In the United States, a preference for market-led approaches, combined with a fragmented regulatory landscape and shifting political priorities, has slowed progress on sustainability-related rules. Meanwhile, in China, the financial system relies heavily on bank lending and on short-term rather than long-term debt.[1] As a result, early green policies logically targeted banks first, not capital markets. The green bond market has lagged, with issuance falling by around 18% in 2024 compared with 2023, and green bonds accounting for only about 0.85% of the domestic bond market, down from 1.17% in 2023.[2]

Europe, by contrast, stands out as the most advanced region across the selected indicators. Remaining gaps are concentrated in a few areas, notably mandatory frameworks for green, social and sustainability bond issuance and the systematic enforcement of greenwashing rules across the EU member countries.

OVERVIEW OF DIFFERENT POLICY MEASURES ACROSS COUNTRIES FOR GREENING CAPITAL MARKETS

	AUSTRALIA	BRAZIL	CHINA
ASSET MANAGEMENT	▪ Australian Securities and Investment Commission (ASIC) RG 280 requires in-scope asset managers to include climate statements in the annual report in line with Australian Accounting Standard Board (AASB) S2: Climate-related Disclosures (ISSB-aligned). ▪ ASIC RG 65 (s1013DA): all "products with an investment component" (managed funds, super, investment life, multi-option products) must disclose how labour, environmental, social and ethical factors are considered in selection/retention/realisation, or clearly state they are not considered.	▪ The Securities and Exchange Commission (Comissão de Valores Mobiliários/CVM) Resolution 175 is the unified investment funds rule (replacing ICVM 555), setting formation, disclosure and service-provider duties. ▪ Brazilian Financial and Capital Markets Association (ANBIMA) adds ESG fund classification and naming guidance.	▪ No single nationwide, asset management companies (AMC) specific sustainability disclosure rule yet. If an AMC is listed, it falls under the exchanges' Sustainability Report (Trial) Guidelines. ▪ No single mandatory ESG product rule; disclosure follows The China Securities Regulatory Commission (CSRC) prospectus rules, with Asset Management Association of China (AMAC) Green Investment Guidelines (2018) providing voluntary ESG strategy/reporting guidance for public and non-public funds and AM plans.
FRAMEWORK FOR GREEN BONDS	▪ There is no Australia-specific mandatory "green bond" rule set at listing. Issuers listing bonds on Australian Securities Exchange (ASX) follow normal Corporations Act/ASX Listing Rules disclosure. ▪ Green status is driven by frameworks (ICMA GBP/Climate Bonds) and subject to ASIC's general anti-misleading rules and Information Sheet (INFO) 271.	▪ No CVM "green" listing rule, issuers follow general offering/listing rules. ▪ Market uses ANBIMA's Guide for Sustainable Bond Offerings and B3 thematic-bond resources (green, social, sustainability, and sustainability-linked) aligned to ICMA practices.	▪ "Green" status guided by China Green Bond Principles and the Green Bond Endorsed Projects Catalogue.
DISCLOSURE REQUIREMENT FOR LISTED COMPANIES	▪ Australia's new climate-reporting law, established by the Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Act 2024 phases in mandatory climate-related disclosures for large entities, for financial years starting 1 Jan 2025. ▪ Reports must follow AASB S2 (Australia's climate standard aligned to ISSB) and sit within the annual report.	▪ CVM Resolution 193 adopts the ISSB (International Sustainability Standards Board) baseline, voluntary from FY 2024, moving to mandatory for publicly held entities from FY 2026.	▪ Mainland exchanges (SSE/SZSE/BSE) issued Sustainability Report (Trial) Guidelines in Apr 2024 for listed companies, with staged mandatory reporting for major index constituents from 2026. ▪ The Ministry of Finance is building unified Corporate/Business Sustainability Disclosure Standards (CSDS) that converge with ISSB (IFRS S1/S2).
CARBON MARKET	▪ Australia operates a compliance market via the Safeguard Mechanism with declining facility baselines for large emitters. ▪ Facilities below baseline generate Safeguard Mechanism Credits (SMCs), those above must surrender SMCs and/or Australian Carbon Credit Units (ACCUs). ▪ A separate voluntary ACCU market coexists.	▪ Law 15.042/2024 establishes the national cap-and-trade Sistema Brasileiro de Comércio de Emissões (SBCE); implementation is underway, with a multi-year build-out and complementary crediting frameworks.	▪ Mainland exchanges (SSE/SZSE/BSE) issued Sustainability Report (Trial) Guidelines in Apr 2024 for listed companies, with staged mandatory reporting for major index constituents from 2026. ▪ The Ministry of Finance is building unified Corporate/Business Sustainability Disclosure Standards (CSDS) that converge with ISSB (IFRS S1/S2).
RULES ON ESG RATING	▪ No dedicated licensing/rules yet.	▪ No dedicated ESG rating licensing regime; oversight comes via general CVM conduct/ disclosure rules.	▪ National ETS operates under State Council Interim Regulations effective 1 May 2024 (power sector first; expansion underway); entities may use China Certified Emission Reduction (CCER) offsets within set limits after the 2024 CCER relaunch.
ENFORCEMENT ON GREENWASHING	▪ ASIC actively supervises and enforces under INFO 271, targeting vague labels, screens inconsistent with holdings, and claims lacking reasonable grounds. ▪ ASIC uses corrective disclosures, infringement notices, and court actions (multi-million-dollar penalties have been imposed) as enforcement measures.	▪ Brazil's CVM hasn't published any greenwashing interventions report. ▪ CVM flags combating greenwashing in its Sustainable Finance Action Plan and materials, and it has signaled thematic supervision of sustainability reports in 2025–26.	▪ No standalone "greenwashing law", actions proceed under securities/advertising/consumer-protection laws.

OVERVIEW OF DIFFERENT POLICY MEASURES ACROSS COUNTRIES FOR GREENING CAPITAL MARKETS CONT.

	EU	FRANCE	GERMANY
ASSET MANAGEMENT	▪ The Sustainable Finance Disclosure Regulation (SFDR) requires financial market participants/advisers to disclose sustainability information at entity level and product level (in force since 2021). ▪ In parallel, 2021 delegated acts amended AIFMD/UCITS/MiFID II* to integrate sustainability risks, factors and client sustainability preferences into policies, governance and suitability. ▪ ESMA's Guidelines on funds' names using ESG/sustainability terms introduce the 80% portfolio test and exclusions to curb greenwashing (rolling into National Competent Authority (NCA) supervision in 2025/26)	▪ Same requirement as EU. ▪ The Autorité des Marchés Financiers (AMF) ESG doctrine (Position-Recommendation DOC-2020-03) was updated in Jan 2025 to align with ESMA's fund-names guidance on using ESG terms. ▪ Article 29 of the Energy-Climate Law (2019) imposes extra ESG/climate disclosure for French institutional investors ▪ Additionally, France operates voluntary labels: Label ISR (Socially Responsible Investment) tightened which exclude companies developing new coal/oil/gas projects; Label Greenfin excludes fossil fuels and sets robust use-of-proceeds/reporting criteria.	▪ Follow EU requirements ▪ BaFin's Merkblatt (Guidance Notice) on dealing with sustainability risks (Dec 2019) applies across supervised firms; BaFin also consulted Guidelines on sustainable investment funds (2021) to curb greenwashing in retail funds.
FRAMEWORK FOR GREEN BONDS	▪ The European Green Bond Regulation (Reg. (EU) 2023/2631) creates the voluntary "European Green Bond (EuGB)" label with taxonomy-aligned use-of-proceeds.	▪ Follows EU requirements	▪ Follows EU requirements
DISCLOSURE REQUIREMENT FOR LISTED COMPANIES	▪ Under the Corporate Sustainability Reporting Directive (CSRD), companies must report using European Sustainability Reporting Standards (ESRS) on a phased timetable.	▪ Follows EU requirements	▪ Follow EU requirements ▪ The Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz, LkSG) in force since Jan 2023 imposes human-rights and certain environmental due-diligence/ reporting duties on large companies. ▪ Policy adjustments have been discussed/announced in 2024–2025 ahead of the EU-wide CSDDD.
CARBON MARKET	▪ The EU operates a compliance Emissions Trading System (EU ETS) covering ~45% of emissions. ▪ The Carbon Border Adjustment Mechanism (CBAM) runs transitionally 2023–2025 (report-only), with the definitive regime from 2026.	▪ EU ETS applies ▪ Additionally, a national carbon tax known as Contribution Climat-Énergie (CCE), applies mainly to sectors outside the EU ETS, notably transport and residential/tertiary heating fuels	▪ EU ETS applies ▪ Plus a national carbon price via the nEHS (national emissions trading system) for heating/transport fuels under the Fuel Emissions Trading Act (BEHG).
RULES ON ESG RATING	▪ The new Regulation (EU) 2024/3005 on the transparency and integrity of ESG rating activities establishes an EU regime for registration, transparency, governance and conflicts.	▪ Follows EU requirements	▪ Follows EU requirements
ENFORCEMENT ON GREENWASHING	▪ The Directive (EU) 2024/825 ("Empowering Consumers for the Green Transition") amends the Unfair Commercial Practices Directive/ Consumer Rights Directive to ban generic green claims and offset-based "carbon neutral" claims unless robustly substantiated; Member States must apply the rules by 2026. ▪ The EU Taxonomy adds product-level disclosures for SFDR Art. 8/9 products and sets how investee KPIs are reported via the Article 8 Delegated Act.	▪ Beyond EU-wide consumer rules, France has a strong domestic toolkit: ▪ The consumer authority DGCCRF (Competition, Consumer Affairs and Fraud Control) issued a revised Practical Guide to Environmental Claims (May 2023), and; ▪ ADEME (ecological transition agency) published an Anti-Greenwashing Guide (Apr 2024). ▪ The AMF & ACPR publish an annual joint report reviewing Paris-market actors' climate commitments and practices	▪ Beyond EU rules, BaFin addresses greenwashing risks through supervision (incl. its 2019 Merkblatt). ▪ Prosecutors have issued multi-million-euro fines (e.g, €25m against DWS) ▪ Courts have ruled that vague "climate-neutral" claims can be misleading, and ▪ NGOs like DUH are winning cases against major brands.

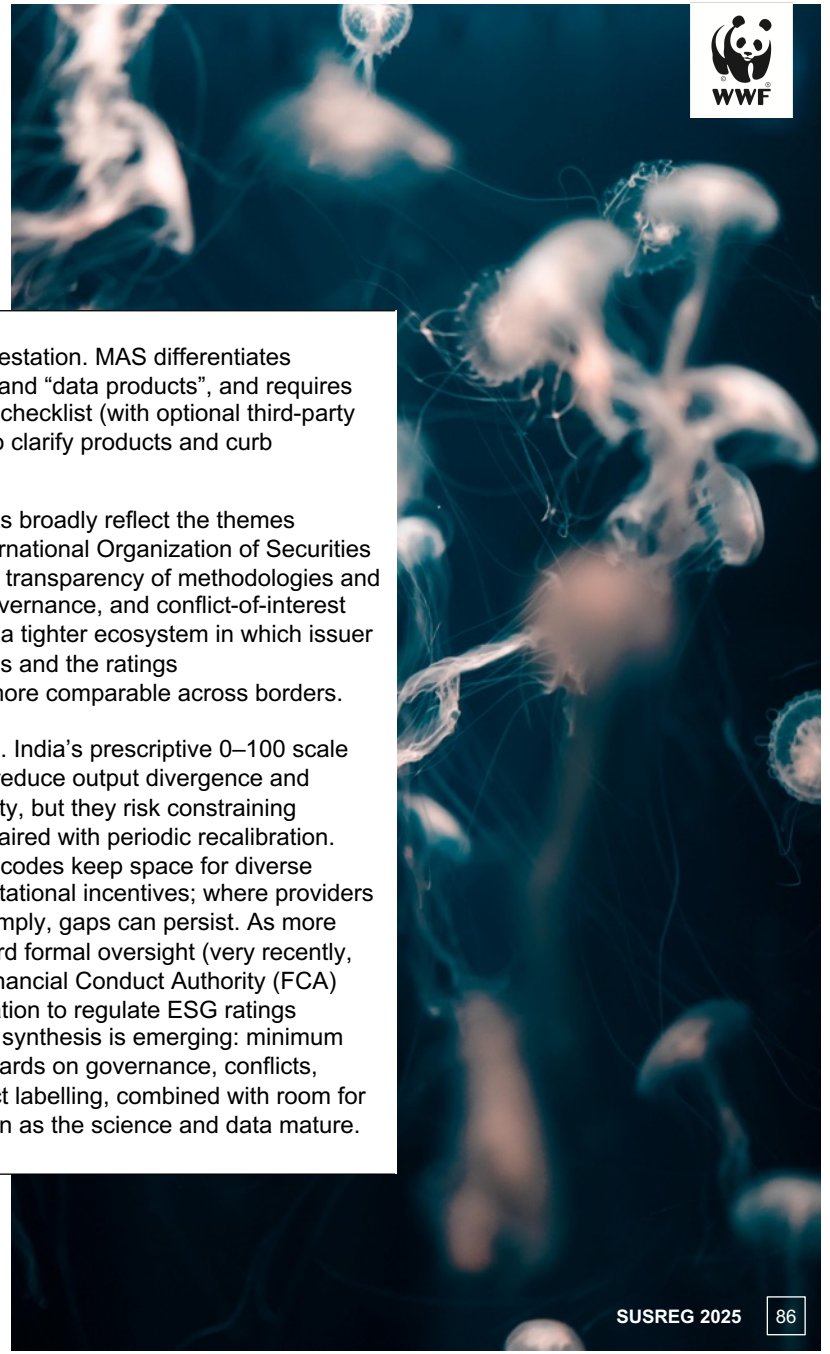
OVERVIEW OF DIFFERENT POLICY MEASURES ACROSS COUNTRIES FOR GREENING CAPITAL MARKETS CONT.

	INDIA	JAPAN	SINGAPORE
ASSET MANAGEMENT	▪ No Asset Management Company (AMC)-specific sustainability rule nationwide, if an AMC is listed, it must file the Business Responsibility and Sustainability Report (BRSR) in its annual report. ▪ The Securities and Exchange Board of India (SEBI) created an ESG mutual fund category with tighter guardrails; strategy-specific schemes, enhanced disclosures, and tests aimed at curbing greenwashing.	▪ No Asset Management Company (AMC)-specific sustainability rule nationwide, if an AMC is listed, it must include a "Sustainability Information" section in its Annual Securities Report. ▪ The Financial Services Agency (FSA) tightened supervision of ESG investment trusts (mutual funds) by revising the Comprehensive Supervisory Guidelines to address fund naming/disclosure.	▪ Monetary Authority of Singapore (MAS) Guidelines on Environmental Risk Management (ENRM) for asset managers set supervisory expectations on governance, portfolio construction, risk management, stewardship and disclosure of environmental risk (in force since 2022). ▪ MAS Circular CFC 02/2022 on retail ESG funds (effective 1 Jan 2023) and 2024 Information Paper provide clear strategy/label definition.
FRAMEWORK FOR GREEN BONDS	▪ SEBI's Revised Disclosure Requirements for Green Debt Securities (2023) strengthen use-of-proceeds, pre/post-issue and continuous reporting under the NCS framework. ▪ SEBI added a 2025 ESG debt framework for other labelled bonds.	▪ "Green" status follows the Ministry of the Environment (MOEJ) Green Bond Guidelines and related MOEJ guidelines for sustainability-linked bonds.	▪ SGX's Sustainable Fixed Income initiative recognizes green/social/sustainability bonds that meet external standards (e.g. ICMA/ASEAN), without having its own labelling standard. Issuers must keep up required post-issuance reporting to maintain recognition.
DISCLOSURE REQUIREMENT FOR LISTED COMPANIES	▪ The Business Responsibility and Sustainability Reporting (BRSR) is mandatory for the top-1,000 listed companies; BRSR Core requires reasonable assurance on a defined subset of metrics.	▪ All listed companies must add the Sustainability Information section in statutory reports. ▪ The Tokyo Stock Exchange (TSE) also expects climate disclosure aligned to TCFD on a comply-or-explain basis. ▪ The Sustainability Standards Board of Japan (SSBJ) issued Japan's inaugural sustainability disclosure standards in March 2025, confirming alignment with ISSB.	▪ Singapore Exchange (SGX) requires an annual sustainability report (Rule 711A/B) with Task Force on Climate-related Financial Disclosures (TCFD). ▪ SGX/ACRA are phasing in International Sustainability Standards Board (ISSB)-based Climate-Related Disclosures (CRD), with timelines extended in Aug 2025.
CARBON MARKET	▪ The Carbon Credit Trading Scheme (CCTS) establishes the Indian Carbon Market with a compliance mechanism under the Energy Conservation Act. ▪ The Bureau of Energy Efficiency (BEE) has issued the detailed compliance procedure and opened registrations in 2025.	▪ Japan operates the national GX-ETS (Green Transformation Emissions Trading Scheme), Phase 1 voluntary since FY2023, with plans to transition to a compliance ETS from FY2026. ▪ Offsets/credits are complemented by the government-run J-Credit Scheme (domestic reductions/removals).	▪ Singapore runs a statutory carbon tax under the Carbon Pricing Act. ▪ From 1 Jan 2024, liable facilities may offset up to 5% of taxable emissions with International Carbon Credits (ICCs).
RULES ON ESG RATING	▪ SEBI's Master Circular for ESG Rating Providers (ERPs) sets registration, transparency, methodology and conflict-management requirements.	▪ No licensing regime. ▪ The FSA's Code of Conduct for ESG Evaluation and Data Providers (voluntary, comply-or-explain).	▪ Singapore Code of Conduct for ESG Rating and Data Product Providers (MAS-led, *comply-or-explain*) sets transparency, governance and conflict management baselines, adoption is encouraged.
ENFORCEMENT ON GREENWASHING	▪ SEBI's ESG Mutual Fund circular targets mis-selling/greenwashing through prescriptive scheme disclosures. ▪ Beyond securities, India now has economy-wide greenwashing standards, the Central Consumer Protection Authority (CCPA)'s Guidelines for Prevention and Regulation of Greenwashing or Misleading Environmental Claims and ASCI's (Advertising Standard Council of India) Guidelines for Advertisements Making Environmental/Green Claims which regulate environmental claims in marketing and advertising across sectors.	▪ Japan lacks a standalone "greenwashing law" but fund-level FSA guidance is enforced through supervisory reviews, and broader environmental claims are policed under consumer/advertising law led by the Consumer Affairs Agency.	▪ For funds, MAS applies the ESG-funds circular and its Good Disclosure Practices paper in supervision. ▪ The Competition and Consumer Commission of Singapore (CCCS) has issued/newly updated guidance under the Consumer Protection (Fair Trading) Act (CPFTA) to police misleading environmental claims.

OVERVIEW OF DIFFERENT POLICY MEASURES ACROSS COUNTRIES FOR GREENING CAPITAL MARKETS CONT.

	SOUTH AFRICA	UK	USA
ASSET MANAGEMENT	▪ No Asset Management Company (AMC)-specific rule yet. If an AMC is listed, it follows the Johannesburg Stock Exchange (JSE) *Sustainability* and *Climate* Disclosure Guidance. ▪ No dedicated ESG fund-naming/product rule yet. CIS (Collective Investment Scheme) managers operate under the Collective Investment Schemes Control Act (CISCA) and the Financial Sector Conduct Authority (FSCA) conduct standards. ▪ King IV, South Africa's leading corporate-governance code on an "apply and explain" basis, with 17 principles and sector supplements (including a Retirement Funds supplement that speaks directly to institutional investors and their service providers (asset & fund managers)	▪ The Financial Conduct Authority (FCA) requires TCFD-consistent climate disclosures for asset managers and asset owners under PS21/24. ▪ The FCA's Sustainability Disclosure and Labelling Regime (SDR) introduces investment labels, naming/marketing rules, and product & entity disclosures. ▪ Anti-greenwashing rule (applies to *all* FCA-authorised firms' sustainability claims) in force since May 2024, with companion guidance FG24/3 ▪ Transitional flexibility on SDR naming/marketing rules until 2 Apr 2025	▪ No Asset Management Company (AMC)-specific rule yet. ▪ The Securities and Exchange Commission (SEC)'s amended "Names Rule" (Rule 35d-1) expands the 80% investment policy to funds using Environmental, Social and Governance (ESG) or thematic terms; compliance dates now extend into 2026 after an SEC deferral.
FRAMEWORK FOR GREEN BONDS	▪ The JSE Green Bond Segment sets eligibility and disclosure (including a post-issuance report one year after listing).	▪ No statute creating a "green bond" listing rule; the London Stock Exchange (LSE) Sustainable Bond Market (SBM) admits labelled bonds subject to external review and post-issuance reporting, alongside general LSE admission standards.	▪ No U.S. exchange-specific "green bond" listing rule. Issuers follow general federal securities rules; "green" status relies on market frameworks (e.g., ICMA) and anti-misleading provisions of the securities laws.
DISCLOSURE REQUIREMENT FOR LISTED COMPANIES	▪ JSE guidance (2022, being updated to ISSB) encourages TCFD/ISSB-style reporting. ▪ Additionally, the Companies and Intellectual Property Commission (CIPC) added an ISSB-aligned sustainability module to the eXtensible Business Reporting Language (XBRL) filing taxonomy (Oct 1, 2024) to encourage voluntary ESG data reporting.	▪ TCFD-aligned reporting is mandatory for in-scope companies for financial years starting on/after 6 Apr 2022 under Companies Act regulations. ▪ The government is consulting on UK Sustainability Reporting Standards (UK SRS) to endorse ISSB (IFRS S1/S2), with voluntary UK SRS drafts out for consultation in 2025.	▪ The SEC's climate rule is paused, existing federal baseline remains the 2010 guidance on climate risk within material disclosures. ▪ California enacted SB 253 (GHG emissions disclosure) and SB 261 (climate-risk reporting) for large companies doing business in the state.
CARBON MARKET	▪ South Africa runs a carbon tax (Carbon Tax Act, in force since 2019). As of 2025, firms may claim a carbon offset allowance up to 10% of taxable emissions (Regulations updated Mar 15, 2025). ▪ Climate Change Act, 22 of 2024 introduces carbon budgets for large emitters.	▪ The UK Emissions Trading Scheme (UK ETS) is the national cap-and-trade compliance market (power, industry, aviation), with 2025 policy papers on scope expansions (e.g., maritime, waste) and greenhouse-gas removals.	▪ No federal carbon tax or ETS. ▪ Compliance carbon markets operate at the state/regional level. ▪ Notably California's Cap-and-Trade and the Regional Greenhouse Gas Initiative (RGGI) for power-sector CO_2 across (currently) ten Northeastern states, with a strengthened cap trajectory to 2037.
RULES ON ESG RATING	▪ No dedicated licensing regime for ESG rating providers.	▪ The government has moved to regulate ESG rating providers, publishing a consultation response and draft legislation to bring them under FCA oversight.	▪ No federal licensing regime for ESG rating providers.
ENFORCEMENT ON GREENWASHING	▪ No dedicated greenwashing report. ▪ Enforcement occurs via the Advertising Regulatory Board (ARB) and consumer-protection law (National Consumer Commission), with high-profile rulings on misleading environmental claims (e.g., the TotalEnergies case).	▪ The FCA Anti-Greenwashing Rule (effective 31 May 2024) requires any sustainability claim by authorized firms to be fair, clear and substantiated. ▪ The UK doesn't publish a single, consolidated "greenwashing interventions" report. ▪ The UK government announced (July 2025) it will not proceed with a UK green taxonomy, signalling a pivot to other tools to combat greenwashing.	▪ The SEC pursues cases under existing antifraud/misstatement rules (e.g., fund "greenwashing" settlements). ▪ At the consumer level, the Federal Trade Commission (FTC) enforces against deceptive environmental claims under its Green Guides (update process ongoing). ▪ The USA doesn't publish a single, consolidated "greenwashing interventions" report.

REGULATING ESG RATINGS IN ASIA: INDIA'S MANDATORY FRAMEWORK VS JAPAN AND SINGAPORE'S PRINCIPLE-BASED APPROACHES



Scrutiny of ESG ratings has intensified as investors and regulators confront opaque methodologies, inconsistent scores, and conflicts of interest. A global shift is under way from largely market-led practices to formal oversight. The European Union has already adopted a dedicated ESG Ratings Regulation that will place providers under European Securities and Markets Authority (ESMA) supervision and require authorization, governance safeguards, and methodology disclosures, signaling that ratings themselves are becoming part of the regulated market infrastructure.[1]

India is a progressive example in the Asia Pacific region in this area with a fully mandatory rulebook. In May 2024, the Securities and Exchange Board of India (SEBI) issued a comprehensive Master Circular for ESG Rating Providers (ERPs) that consolidates all prior guidelines and introduces uniform standards and lays out mandatory requirements for all registered ESG rating providers, such as:

- Boards of Directors now bear explicit responsibility for compliance, elevating ESG ratings to a board-level governance issue.
- As a notable feature, SEBI has defined types of ESG rating products, such as core ESG ratings or transition scores, that must be reported on a standardized 0–100 scale for direct comparability.
- Providers must establish an ESG subcommittee, publicly disclose rating methodologies, undergo annual internal audits, and review ESG ratings in response to any material ESG event immediately, and in any case within ten days of its occurrence.

This mandatory regime tackles long-standing concerns about opaque methodologies and inconsistent scoring. By prescribing both process steps (such as subcommittees and audits) and output formats (the 0–100 scale), SEBI aims to enhance investor confidence and enable comparisons across issuers and sectors.[2]

Japan and Singapore have opted for principle-based regimes that lean on market discipline. Japan's Financial Services Agency (FSA) introduced a non-binding Code of Conduct in 2022, operating on a comply-or-explain basis. Providers are expected to publish full methodologies and disclose changes, resource and independence arrangements, and conflict-management policies. By championing a principle-based approach, Japan encourages innovation in ESG methodologies while ensuring key standards of transparency and governance. Rating agencies can experiment with proprietary models, so long as they openly disclose their assumptions and approaches.[3]

In 2023, Singapore's Monetary Authority (MAS) finalized its Code of Conduct in December 2023, issued as a voluntary code with public self-attestation. MAS differentiates between ESG "ratings" and "data products", and requires a public self-attestation checklist (with optional third-party assurance), designed to clarify products and curb greenwashing.[4]

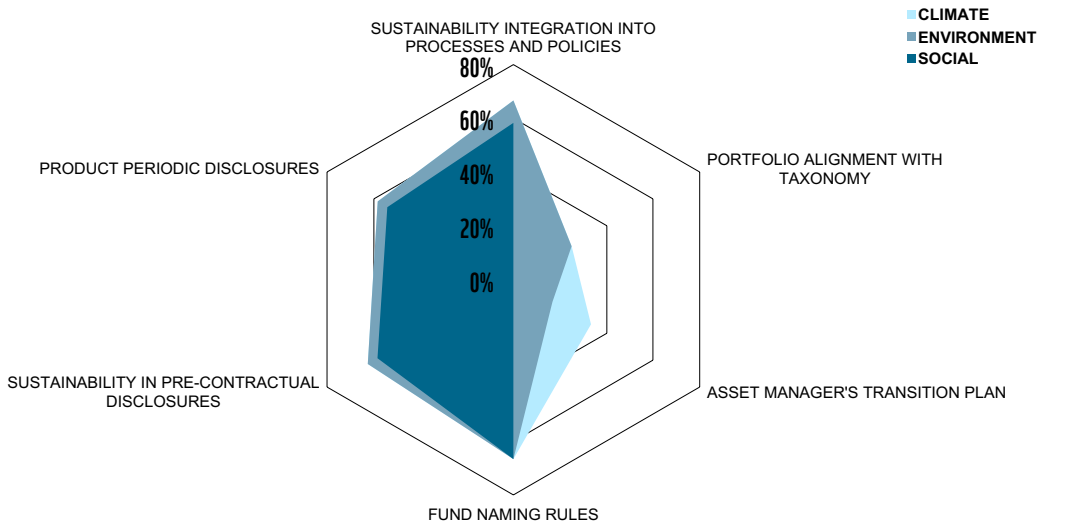
These Asian frameworks broadly reflect the themes championed by the International Organization of Securities Commissions (IOSCO); transparency of methodologies and data sources, sound governance, and conflict-of-interest controls.[5] The result is a tighter ecosystem in which issuer sustainability disclosures and the ratings built on them become more comparable across borders.

Policy trade-offs remain. India's prescriptive 0–100 scale and product taxonomy reduce output divergence and improve investor usability, but they risk constraining experimentation if not paired with periodic recalibration. Japan and Singapore's codes keep space for diverse models but rely on reputational incentives; where providers "explain" rather than comply, gaps can persist. As more jurisdictions move toward formal oversight (very recently, in October 2025, the Financial Conduct Authority (FCA) of UK introduced legislation to regulate ESG ratings providers[6]), a practical synthesis is emerging: minimum and enforceable safeguards on governance, conflicts, disclosure, clear product labelling, combined with room for methodological evolution as the science and data mature.

[1] European Commission. (2024). Regulation (EU) 2024/3005 on the transparency and integrity of Environmental, Social and Governance (ESG) rating activities, and amending Regulations (EU) 2019/2088 and (EU) 2023/2859.
[2] Securities and Exchange Board Board of India. (2024). Master Circular for ESG Rating Providers (ERPs).
[3] Japan Financial Services Agency. (2022). The Code of Conduct for ESG Evaluation and Data Providers.
[4] Monetary Authority of Singapore. (2023). Response to Feedback Received on Proposed Code of Conduct for Environmental, Social and Governance ("ESG") Rating and Data Product Providers.
[5] International Organization of Securities Commissions. (2021). Environmental, Social and Governance (ESG) Ratings and Data Product Providers – Final Report.
[6] Financial Conduct Authority. (2025). FCA welcomes legislation to bring ESG ratings providers into regulation.

REGULATION OF SUSTAINABLE ASSET MANAGEMENT IS ADVANCING FASTER AT THE PRODUCT LEVEL THAN AT THE ENTITY LEVEL

FIGURE 24: AVERAGE ACHIEVEMENT OF 12 COUNTRIES ON SELECT INDICATORS OF CAPITAL MARKETS



Note: The number displayed on the graph represents the average fulfillment of indicators. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

In March 2023, the Japan Financial Services Agency (FSA) revised its Comprehensive Supervisory Guidelines for Financial Instruments Business Operators to tackle greenwashing in publicly offered ESG investment funds. *Examiners now use explicit checkpoints covering whether fund names fairly reflect the strategy, consistency between stated objectives, investment selection and disclosures, the manager's governance, resources and expertise for ESG analysis, as well as due diligence and monitoring of holdings.*

In parallel, the FSA finalized a Code of Conduct for ESG Evaluation and Data Providers (December 2022). This voluntary, comply-or-explain code sets principles on methodology transparency, data quality, governance and conflict-management, and encourages clear separation between ratings, second-party opinions and verification services. Providers publicly state adherence, and the FSA tracks and publishes endorsements, creating market discipline without a licensing regime.

ASSET MANAGEMENT SUPERVISION

In our framework, the supervision of asset managers includes two interconnected dimensions. The first is entity-level supervision, which looks at how sustainability is embedded in governance, risk management, and investment processes within organizations. The second is product-level supervision, which regulates how sustainability features in products are presented and promoted to investors. In practice, the majority of regulatory efforts have focused on the product level, such as guidelines for fund naming, transparency before contracts, and periodic reporting. This route is taken likely because the regulation at the product level is more explicit, enforceable, and protects investors, enabling authorities to address deceptive claims and enhance market transparency, despite uneven integration at the entity level.

Among these instruments, fund naming guidelines are the most structured and enforceable. Their design emphasizes accuracy in labeling, rather than on portfolio development or results, which makes them easy to manage administratively. This accounts for their significant adoption rate: 71% of pilot jurisdictions implement naming regulations that address climate, environmental, and social factors, with only China and South Africa missing these provisions. The EU's ESMA fund naming guidance (2024), featuring quantifiable allocation thresholds and exclusion criteria, illustrates how measurable benchmarks can support market discipline and enhance comparability among funds.

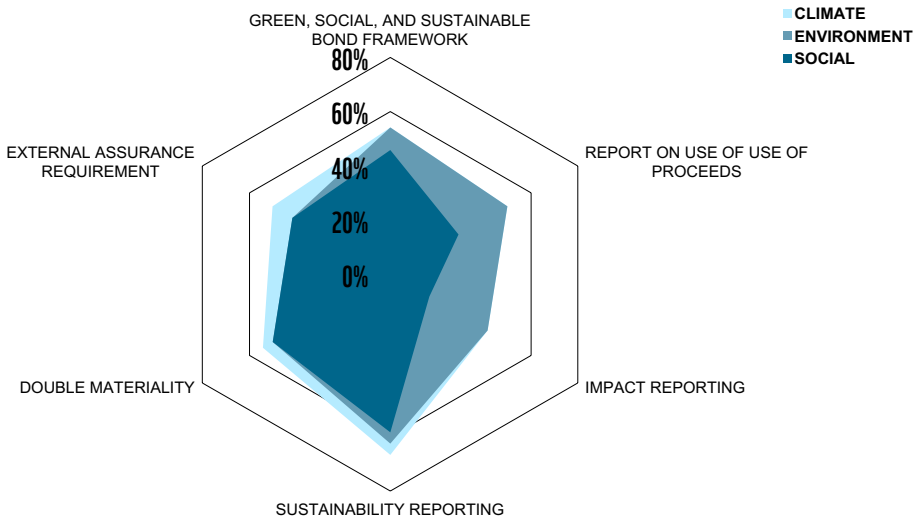
Among the pilot jurisdictions, only India and the United States lack binding sustainability integration mandates for asset managers. This regulatory asymmetry produces a two-speed market in which global managers must navigate inconsistent supervisory expectations across their product lines.

In contrast, disclosing the share of portfolios with green taxonomy alignment and developing transition plans are more complex tasks. These require a deeper integration of sustainability considerations into investment decision-making processes, which many asset managers have yet to fully implement. Currently, only the EU region, including France and Germany, mandates the disclosure of portfolio alignment with the green taxonomies of all assessed countries. The EU also requires disclosure of a transition plan for asset managers subject to the CSRD.

Looking ahead, supervisory focus will need to balance market integrity with transition effectiveness. As sustainability transitions from a niche area to a common investment approach, the supervision focus must expand from merely preventing misrepresentation to facilitating the transition of capital that contributes to the attainment of climate and nature goals. This will necessitate incorporating sustainability oversight into regulatory and conduct frameworks, defining the relationship between entity and product level regulations, and enhancing data reliability throughout the investment chain.

ADVANCEMENTS IN REPORTING STANDARDS FOR LISTED COMPANIES ACROSS JURISDICTIONS, BUT ASSURANCE AND IMPACT DISCLOSURE LAG BEHIND

FIGURE 25: AVERAGE ACHIEVEMENT OF 12 COUNTRIES ON SELECT INDICATORS OF CAPITAL MARKETS



Note: The number displayed on the graph represents the average fulfillment of indicators. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

Under the Securities and Exchange Board of India (SEBI)'s Non-Convertible Securities (NCS) regime, a circular was launched in February 2023 to tighten the definition of Green Debt Securities and make pre- and post-issuance disclosures mandatory. *This includes use of proceeds, selection process, management of proceeds, ongoing impact reporting, and third-party review. Making India one of the few markets with statutory GSS-bond requirements. In 2025, the International Financial Services Centres Authority (IFSCA) introduced a Transition Bonds framework for listings at Gujarat International Finance Tec-City (GIFT City), moving from consultation to approval for issuance via circular. In most jurisdictions, GSS issuance remains voluntary and guided by the International Capital Markets Association (ICMA) Principles rather than statute.*

ISSUER SUPERVISION

Issuer supervision is central to ensuring that sustainability commitments translate into verifiable, decision-useful disclosures. Over the past decade, the regulatory architecture for sustainability reporting has expanded rapidly, with growing convergence toward international standards and an emerging expectation that disclosure must evolve from narrative explanation to assured, quantitative, and impact-oriented reporting.

The robust results in sustainability reporting seen across regions signify this worldwide change. Frameworks like Japan's Sustainability Standards Board (SSBJ) and Brazil's CBPS (The Comitê Brasileiro de Pronunciamentos de Sustentabilidade) Standards represent important advancements, both clearly aligned with the International Sustainability Standards Board (ISSB)'s IFRS S1 and S2 frameworks. This alignment indicates the development of domestic reporting systems that enhance local significance while maintaining international compatibility. The path is clear, sustainability reporting has transitioned from a voluntary option to a component of financial disclosure duties, progressively integrated into listing standards and corporate reporting regulations.

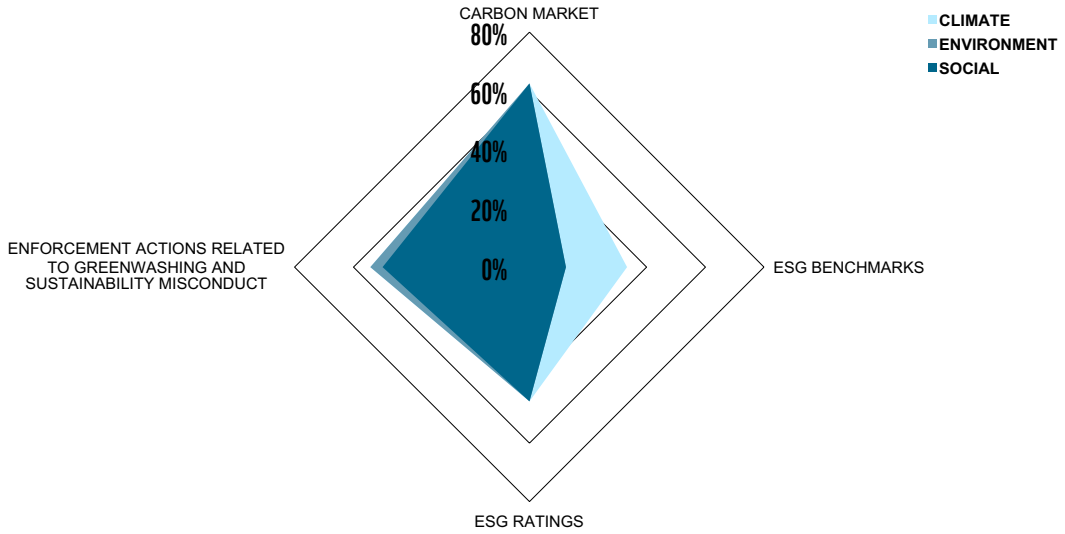
The idea of double materiality, although frequently discussed, is still inconsistently implemented. The European Union leads in this area, as the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS) specifically mandate organizations to disclose how sustainability matters influence their financial results (outside-in) and how their operations affect society and the environment (inside-out). France, having completely integrated the CSRD into its national legislation, leads in implementing this method.

External assurance of sustainability information is another critical but still nascent element of issuer supervision. While financial reporting has long been subject to mandatory audit, the assurance of ESG data poses methodological and capacity challenges, ranging from the definition of suitable criteria to the lack of standardized metrics for social and environmental indicators. The EU (under the CSRD) and Brazil (through CVM Resolution 193) currently lead in mandating external assurance, setting a precedent that others are likely to follow as assurance capacity and methodologies mature.

Impact reporting for sustainable bonds remains an emerging area, as it requires measuring outcomes rather than inputs. South Africa's JSE Debt Listing Requirements and India's SEBI rules for green debt have begun to define expectations for climate and environmental impacts, though social impacts are not yet covered. Overall, issuer supervision is progressing from voluntary reporting toward mandatory, assured, and impact-linked disclosure.

CARBON MARKETS ARE ADVANCING, BUT ESG BENCHMARK REGULATION AND GREENWASHING ENFORCEMENT REMAIN UNDERDEVELOPED ACROSS JURISDICTIONS

FIGURE 26: AVERAGE ACHIEVEMENT OF 12 COUNTRIES ON SELECT INDICATORS OF CAPITAL MARKETS



Note: The number displayed on the graph represents the average fulfillment of indicators. Partially met criteria are assigned a 50% fulfillment, while fully met criteria result in 100% fulfillment.

***Supervisors and courts have sharpened greenwashing scrutiny in Germany. The Federal Financial Supervisory Authority (BaFin) has made combating greenwashing a medium-term supervisory priority and expects firms to manage and substantiate sustainability claims**. Enforcement has followed, in April 2025, Frankfurt prosecutors fined DWS €25 million for misleading ESG marketing (one of Europe's largest ESG penalties) after a multi-year probe. Courts have also set clear advertising rules, in June 2024, Germany's Federal Court of Justice held that "climate-neutral" claims are deceptive unless the basis (e.g., offsets vs. real reductions) is explained in detail. Civil society litigation has added pressure, Deutsche Umwelthilfe (DUH) won greenwashing suits against Lufthansa and Adidas in March 2025 over misleading sustainability claims. Overall, Germany couples supervisory focus with high-profile prosecutions and landmark court rulings that require precise, evidence-backed green claims.*

MARKET INFRASTRUCTURE

A credible and well-functioning market infrastructure is the foundation of sustainable capital markets. It ensures that sustainability information is not only disclosed, but also priced, benchmarked, and policed with integrity. In our pilot framework, this infrastructure rests on three mutually reinforcing pillars: (i) carbon markets that internalize environmental externalities by putting a price on emissions; (ii) regulatory frameworks for ESG benchmarks and ratings that translate sustainability performance into consistent and investable metrics; and (iii) enforcement measures that safeguard the credibility of the market by deterring greenwashing and misrepresentation.

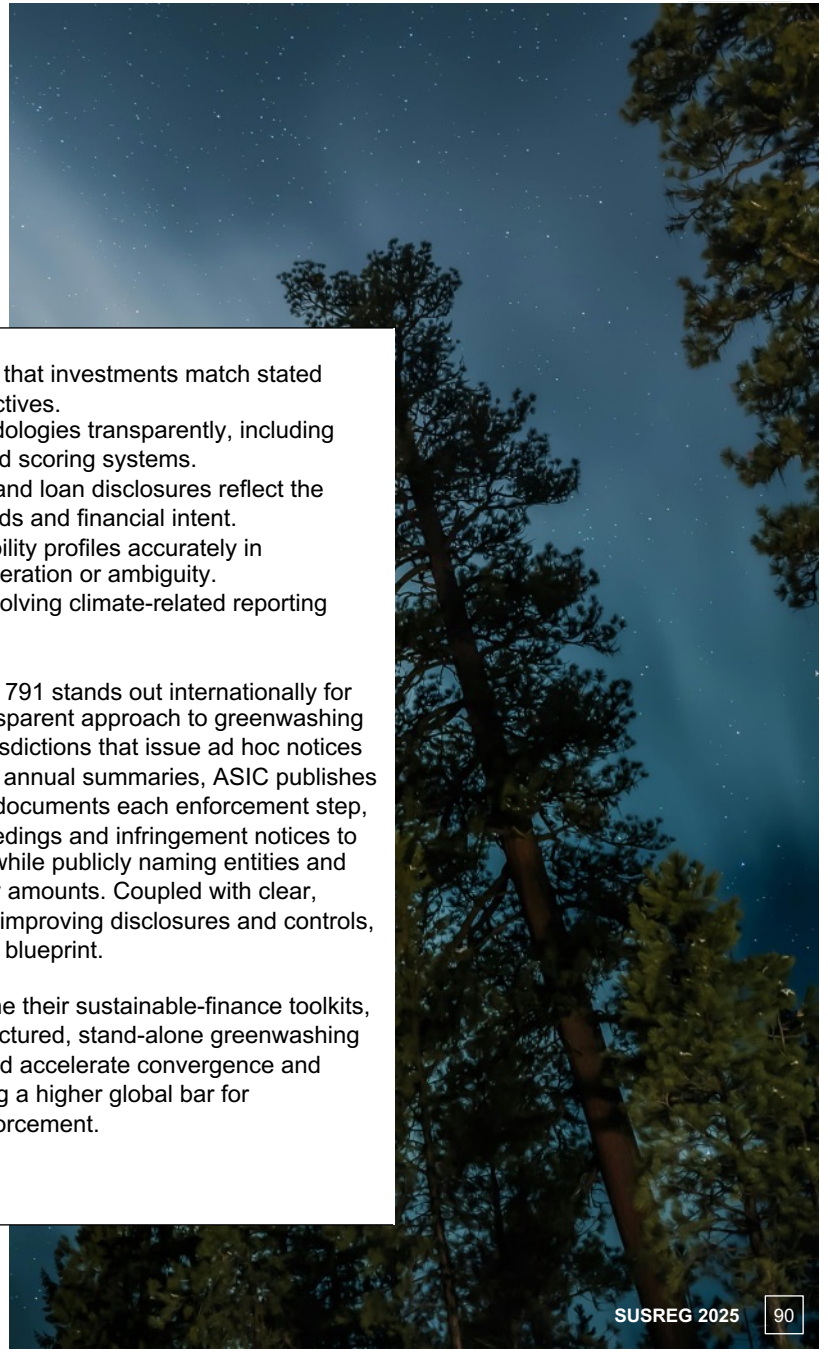
Carbon markets remain the most advanced component of this infrastructure. They embody the principle that what is measured and priced can be managed. The expansion of carbon pricing mechanisms, through Emissions Trading Systems (ETS), voluntary carbon market, and offset credit system, shows growing policy convergence around market-based decarbonization. The EU, UK, and China ETS rank among the largest and most liquid markets for carbon allowances, whereas frameworks like Australia's Safeguard Mechanism and Australian Carbon Credit Unit (ACCU) scheme depend on offset credits to encourage compliance and voluntary demand. Nonetheless, there is still variability among jurisdictions concerning design, sectoral coverage, and measurement, reporting, and verification (MRV) components.

The regulation of ESG benchmarks and ratings constitutes the second essential component. With investors depending more on external evaluations for capital allocation, the regulatory framework has begun to encompass these to guarantee transparency, governance, and the management of conflicts of interest within these services. The European Union's ESG Ratings Regulation (2024) and India's Securities and Exchange Board of India (SEBI) framework for ESG Rating Providers represent significant steps toward establishing oversight and uniformity in a previously unclear domain. However, the remaining jurisdictions have not established such a framework yet.

The third pillar, enforcement against greenwashing, is equally essential for sustaining trust and integrity in the capital markets. With the rise of sustainable investment products, concerns regarding inflated or misleading claims from asset managers and corporations have similarly increased. Supervisory bodies in Australia, France, Germany, and the UK have taken leading roles in initiating enforcement actions, issuing guidance, and refining disclosure rules. This signifies a transition from principles-based oversight to proactive deterrence, where credibility is upheld not just via transparency but through the genuine possibility of penalties and legal measures. Nonetheless, enforcement is inconsistent in both breadth and intensity, with cross-border disparities that may encourage regulatory arbitrage. In conclusion, the framework for sustainable market infrastructure is developing, yet advancements are inconsistent across the three pillars in the 12 evaluated jurisdictions.

THE AUSTRALIAN SECURITIES AND INVESTMENTS COMMISSION (ASIC)'S TRANSPARENT APPROACH TO TACKLING GREENWASHING

ASIC
Australian Securities & Investments Commission



With sustainable finance becoming mainstream, a central challenge has emerged, separating genuine and credible sustainable claims from greenwashing. Australia has responded with transparent and strong enforcement. In August 2024, the Australian Securities and Investments Commission (ASIC) released Report 791, a dedicated, stand-alone account of interventions against greenwashing from 1 April 2023 to 30 June 2024.[1]

ASIC sets out both actions and rationale: two civil penalty proceedings commenced, one finalized, eight infringement notices issued (with over A$123,000 in infringement notice penalties), and 37 corrective-disclosure outcomes spanning listed companies, fund managers, and superannuation trustees. The report also distills findings from thematic surveillance and offers practical recommendations, turning enforcement lessons into market guidance.

The cases show the patterns regulators are targeting. In its first litigated win, ASIC secured a landmark A$11.3 million judgment against Mercer Superannuation for misleading "sustainable" option claims that did not match underlying holdings.[2] Later in 2024, just outside the report's cut-off, the Federal Court ordered Vanguard Investments Australia to pay A$12.9 million for misstatements about exclusionary ESG screens in an "ethically conscious" bond index fund. In March 2025, LGSS (otherwise known as Active Super Fund) received a further A$10.5 million penalty. The through-line is clear: claims about exclusions, carbon neutrality, or "ethical" branding must be supported by systems, data, and portfolio reality.

Infringement notices similarly revealed inconsistencies between published ESG policies and actual holdings. Carbon-emissions screens were applied unevenly across documents and portfolios, prohibited activities were not fully excluded as stated, and prospectuses or investor guides misstated the scope and criteria of sustainability screens.

Beyond courtroom outcomes, ASIC's surveillance identified recurring weak spots: screens promoted in marketing but inconsistently applied; absolute-sounding claims ("zero" or "negative" carbon) without reasonable grounds; and disclosures that left investors guessing about thresholds, scope, or data sources. ASIC then used infringement notices and negotiated corrective disclosures to withdraw or revise unsubstantiated "zero carbon" assertions, temper forward-looking neutrality statements, and clarify revenue thresholds, screening frequency, and methodologies.

ASIC's recommendations to strengthen ESG disclosures and pre-empt greenwashing allegations are straightforward:

- Align climate disclosures with applicable Australian sustainability reporting requirements (including Australian Sustainability Reporting Standards) using clear, specific, accurate language.
- Independently verify that investments match stated exclusions and objectives.
- Explain ESG methodologies transparently, including screening criteria and scoring systems.
- Ensure green bond and loan disclosures reflect the actual use of proceeds and financial intent.
- Represent sustainability profiles accurately in marketing, no exaggeration or ambiguity.
- Stay prepared for evolving climate-related reporting requirements.

Australia's ASIC Report 791 stands out internationally for its comprehensive, transparent approach to greenwashing enforcement. Unlike jurisdictions that issue ad hoc notices or bury actions in broad annual summaries, ASIC publishes a dedicated report that documents each enforcement step, from civil penalty proceedings and infringement notices to corrective disclosures, while publicly naming entities and specifying exact penalty amounts. Coupled with clear, actionable guidance on improving disclosures and controls, ASIC offers a replicable blueprint.

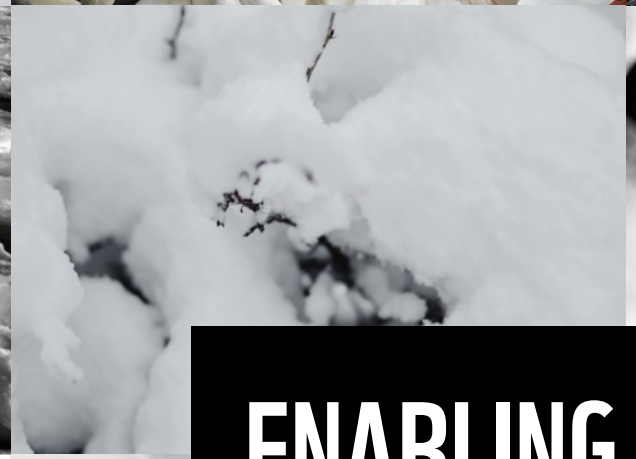
As other regulators refine their sustainable-finance toolkits, adopting a similarly structured, stand-alone greenwashing enforcement report could accelerate convergence and market discipline, setting a higher global bar for sustainable-finance enforcement.

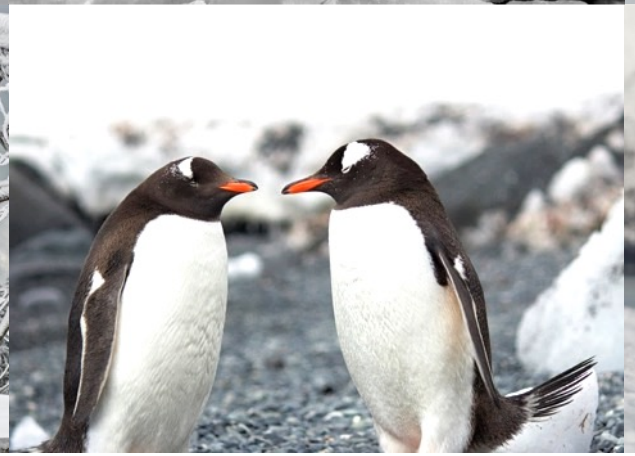
[1] Australian Securities and Investments Commission. (2024). REP 791 ASIC's interventions on greenwashing misconduct: 2023–2024.
[2] Australian Securities and Investments Commission. (2024). ASIC's first greenwashing case results in landmark $11.3 million penalty for Mercer.









ENABLING ENVIRONMENT

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ENABLING ENVIRONMENT
3.1
OUTSIDE SUPERVISOR / CENTRAL BANK MANDATE
Multi-stakeholder initiative
Capacity building efforts
Green taxonomy
Brown taxonomy
Corporates sustainability reporting
Corporates transition plan
Carbon pricing
National-level sustainability strategy
Regulations on sustainable products
Targets & incentives
SME guideline
Sustainable sovereign bond
Just transition initiatives
Industry association guidelines
Public Private Partnership for Insurance Coverage*
Disaster Risk Reduction Facilities*

NOTABLE DEVELOPMENTS IN 2025

The policy environment for sustainable finance is shifting, and unevenly so. This matters because it sets the incentives, data standards, and guardrails that determine how quickly capital can move toward credible climate- and nature-positive activities. Regulatory rewrites now shape not just what companies disclose but how markets price risk and opportunity. The core questions are whether the new rules improve transparency and comparability, lower the cost of capital for genuinely sustainable projects, and avoid creating loopholes that reward re-labeling over real change. Recent developments illustrate a complex and varied global picture:

- **The European Union** has proposed a deregulatory "Omnibus" package that would amend the Corporate Sustainability Reporting Directive (CSRD), the European Sustainability Reporting Standards (ESRS), the EU Taxonomy and the Corporate Sustainability Due Diligence Directive (CSDDD). While presented as a simplification to reduce scope and administrative burden, the package risks weakening the sustainability reporting and due-diligence framework across the real economy and the financial sector. As highlighted in the recent ECB opinion on the Omnibus proposal[1], the ECB's planned climate-related measures may be affected by the changes to the CSRD and CSDDD. In particular, the proposed reduction in the scope of undertakings subject to CSRD sustainability reporting would limit the availability of firm-level data, thereby weakening the Eurosystem's ability to carry out a granular assessment of climate-related financial risks on its balance sheet and within its collateral framework.
- **The United States** has stepped back from several international climate and sustainability initiatives, including the Federal Reserve and FDIC withdrawing from the Network for Greening the Financial System (NGFS) and the federal government exiting key climate-finance platforms such as the UN loss-and-damage fund and the Just Energy Transition Partnerships, signaling a narrower approach to multilateral climate engagement. At the same time, California has moved in the opposite direction by confirming the implementation of SB 253 and SB 261, which will require large companies doing business in the state to disclose greenhouse gas emissions (Scopes 1–3 over time) and climate-related financial risks, making the state a de facto climate-reporting hub despite uncertainty at federal level. However, while implementation of SB 253 is progressing, SB 261 is currently subject to a court-ordered pause on enforcement pending litigation, creating near-term uncertainty over its timeline.[2]
- **Corporate disclosure regime:** A growing group of jurisdictions is building climate and sustainability reporting around the ISSB's IFRS S1 and S2. Australia has legislated mandatory climate-related financial disclosures based on Australian Accounting Standard Board (AASB) S2 for financial years starting on or after 1 January 2025, with AASB S1 providing the broader sustainability context. Brazil's CVM Resolution 193 requires listed companies to report in line with IFRS S1/S2 from 2026 after a voluntary phase-in. Japan's Sustainability Standards Board (SSBJ) issued its first national sustainability disclosure standards in March 2025, closely aligned with ISSB. The UK has launched draft the UK Sustainability Reporting Standards (UK SRS) based on IFRS S1/S2, targeting endorsement decisions in 2025 and use from 2026. Singapore's SGX will require issuers to refer to IFRS S1/S2 in climate reporting from FY2025, and Malaysia's National Sustainability Reporting Framework adopts IFRS S1/S2 as the national baseline, supported by illustrative sector reports (including agriculture and construction) issued in 2025.
- **Green taxonomies:** More countries are rolling out, their own sustainable-finance taxonomies to steer investment and reporting. Australia's sustainable finance taxonomy was released in June 2025; Brazil has approved a national sustainable taxonomy as part of its ecological transformation plan; Chile and Costa Rica have launched taxonomies of environmentally sustainable economic activities and sustainable finance; Kenya issued a Green Finance Taxonomy in 2025; and Paraguay adopted a national green finance taxonomy alongside its green/social/sustainability bond framework. India and Peru, meanwhile, are advancing the design of national taxonomies and related enabling frameworks rather than fully implementing them yet.
- In contrast to the EU and many emerging markets, **the UK government has decided not to proceed with a UK Green Taxonomy after consultation**, arguing that a taxonomy would add complexity without sufficiently advancing the green transition or tackling greenwashing. Instead, the UK intends to prioritize other tools, such as transition-plan frameworks and disclosure rules, marking a clear divergence from the EU's taxonomy-centered model and potentially complicating cross-border coherence between major financial centers.

Taken together, these examples point to an enabling environment that is dynamic but often fragmented. Reporting reforms alone are not enough. Real progress depends on a full bundle of policy tools working in concert.

**This indicator section is only assessed in insurance*

[1] European Central Bank. (2025). Opinion of the European Central Bank of 8 May 2025 on proposals for amendments to corporate sustainability reporting and due diligence requirements.
[2] ESG Today. (2025). U.S. Court Pauses Implementation of California Climate Reporting Law

GREEN TAXONOMIES AND CORPORATE DISCLOSURES ARE STRENGTHENING, THOUGH OTHER KEY TRANSITION LEVERS REMAIN MISSING

A stable and resilient economy relies on a strong financial system and a supportive ecosystem of enabling policies and regulations. Coordinated action by policymakers, financial institutions, and market participants is essential, highlighting the need to assess the broader enabling environment.

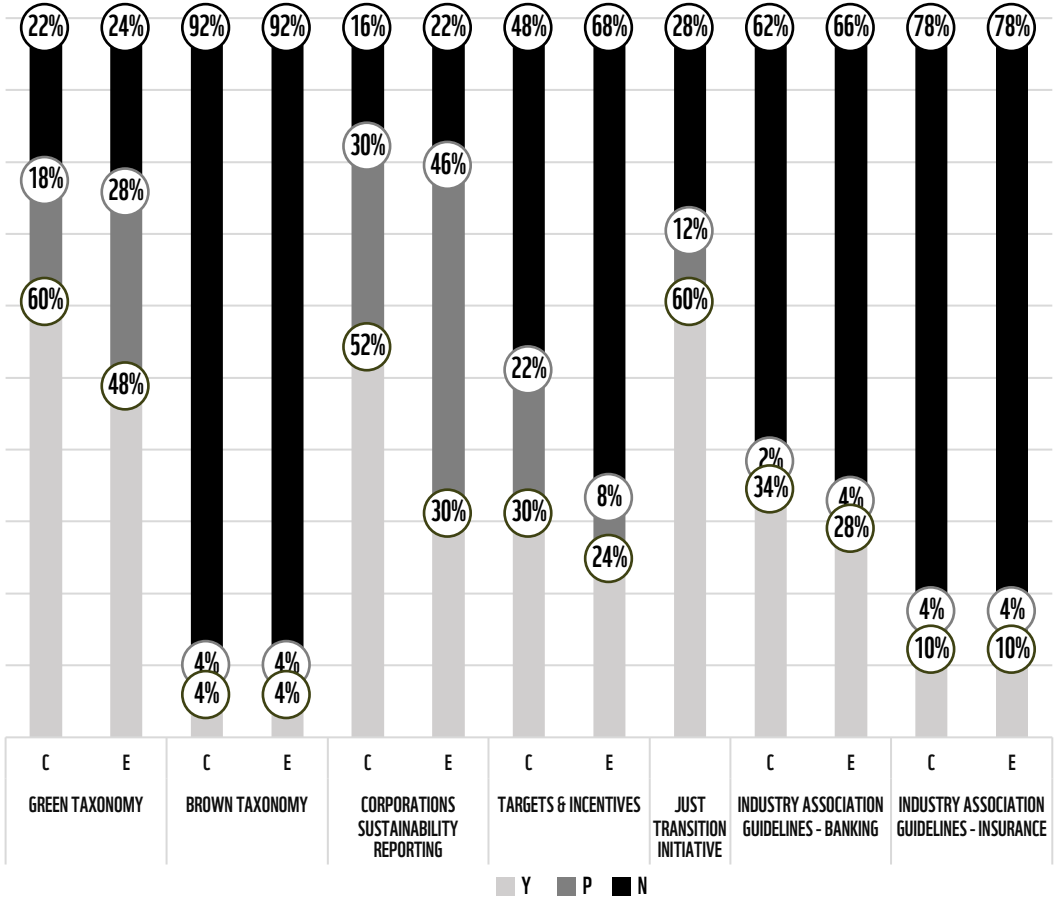
Tools such as green taxonomies are essential to ensure that financial flows are directed towards green activities and away from climate-harming and environmentally degrading investments. The development of green taxonomies shows the highest level of fulfillment across the enabling-environment indicators.

Just-transition initiatives established by governments, present in most countries, also form an important part of the enabling environment, as governments have a responsibility to protect their populations from the growing risks posed by climate change and nature loss.

Mandatory corporate sustainability reporting, aligned with internationally and nationally recognized standards, is the second most advanced indicator, with a combined fulfillment rate of 67%. This progress is largely driven by new regulatory developments, including the wider adoption of the International Sustainability Standards Board (ISSB) IFRS S1 and S2 standards.

Other indicators such as the development of brown taxonomies for unsustainable activities, the establishment of targets and incentives for banks to transition to a net-zero and nature-positive economy, and other related policy measures, are lagging in comparison with significantly lower levels of achievement. Despite these lower fulfillment rates, all elements assessed under the enabling environment remain essential, as they create the conditions for sustainable finance to develop and scale.

FIGURE 27: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECTED ENABLING ENVIRONMENT INDICATORS



Note: The numbers displayed in the graph represent the percentage of countries in the SUSREG scope that do not meet (N), partially meet (P), and fully meet (Y) the SUSREG criteria on the respective indicators.

UK TRANSITION FINANCE GUIDELINES: A FRAMEWORK FOR CREDIBLE DECARBONIZATION PLANS IN HIGH-EMITTING SECTOR

The UK is building the missing bridge between climate ambition and real-economy decarbonization. In August 2025, the Transition Finance Council (co-launched by the City of London Corporation and HM Government) opened a consultation on voluntary Transition Finance Guidelines that set out a consistent, cross-asset way to judge whether financing to transitioning, often high-emitting, entities is genuinely supporting a transition aligned with the goals of the Paris Agreement.

The draft focuses on "Category 4" finance at the entity level (i.e. general-purpose funding for firms that are aligning or already aligned with credible transition pathways). Most capital is allocated in this at this level rather than through ring-fenced projects, yet market practice for assessing the credibility of transition plan at the entity level remains fragmented. Feedback runs to 19 September 2025, with a second consultation planned for winter 2025 and final guidance targeted for 2026.[1]

Two design choices make this draft particularly consequential. First, it is deliberately interoperable with existing reporting regimes, most notably the UK Transition Plan Taskforce (TPT) disclosure framework and the emerging UK Sustainability Reporting Standards which are being developed on the basis of the ISSB's IFRS S1/S2, so investors can translate transition "credibility" assessments into disclosures, covenant structures, and stewardship asks without duplicating processes.

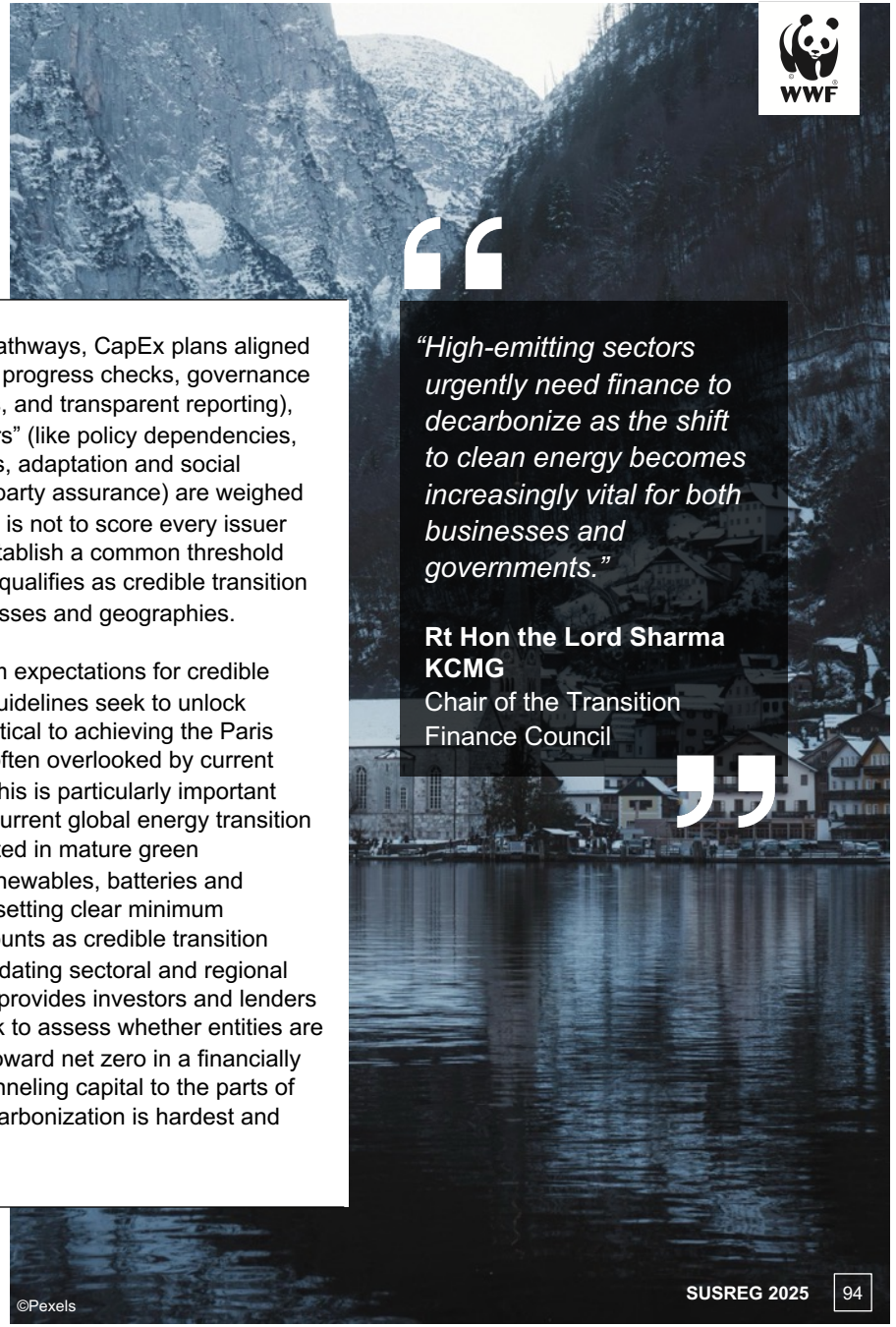
Second, it places particular emphasis on hard-to-abate sectors such as heavy industry (including steel, cement and chemicals), heavy transport and agriculture, where credible transition plans will determine whether capital reduces risk and emissions or simply locks in the status quo. This aligns the Guidelines with the government-commissioned Transition Finance Market Review (TFMR) blueprint to make the UK a global hub for high-integrity transition finance and with the Council's mandate under its new chair.

Substantively, the framework rests on four credibility principles:

- Credible ambition
- Action into progress
- Transparent accountability
- Addressing dependencies

The framework then translates them into six "Universal Factors" that set minimum and evidence-based expectations for any financed entity: interim targets & metrics, implementation, financial viability, governance, disclosure, and engagement. The evidence points are intentionally practical (e.g., interim targets linked to recognized third-party pathways, CapEx plans aligned to those targets, regular progress checks, governance and remuneration hooks, and transparent reporting), while "Contextual Factors" (like policy dependencies, infrastructure constraints, adaptation and social considerations, or third-party assurance) are weighed where material. The aim is not to score every issuer the same way, but to establish a common threshold that rules in or out what qualifies as credible transition finance across asset classes and geographies.

By establishing minimum expectations for credible transition finance, the Guidelines seek to unlock investment in sectors critical to achieving the Paris Agreement's goals but often overlooked by current financing frameworks. This is particularly important given that over 90% of current global energy transition investment is concentrated in mature green technologies such as renewables, batteries and electrified transport. By setting clear minimum expectations for what counts as credible transition finance, while accommodating sectoral and regional realities, the framework provides investors and lenders with a common yardstick to assess whether entities are genuinely progressing toward net zero in a financially viable way, thereby channeling capital to the parts of the economy where decarbonization is hardest and most consequential.



> *"High-emitting sectors urgently need finance to decarbonize as the shift to clean energy becomes increasingly vital for both businesses and governments."*
>
> **Rt Hon the Lord Sharma KCMG**
> Chair of the Transition Finance Council

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[1] Transition Finance Council. (2025). Transition Finance Guidelines: Consultation on entity-level Transition Finance Guidelines.

SPAIN INTRODUCES MANDATORY CARBON REPORTING FOR BUSINESSES AND PUBLIC ENTITIES THROUGH ROYAL DECREE 214/2025

Spain has moved from a largely voluntary registry framework to mandatory law on corporate emissions. Royal Decree 214/2025, in force since 12 June 2025, updates Spain's national register of carbon footprints, offsetting and CO_2 absorption projects and requires companies in scope to calculate their greenhouse-gas emissions and publish a reduction plan with quantified targets over a time horizon of at least five years.[1]

The obligation applies to firms already subject to Spain's non-financial reporting rules under the Commercial Code and the Companies Act. Central government ministries and agencies must do the same and from the calculation corresponding to the year 2028 include Scope 3 in their calculations. [2]

The first filings for Scope 1 and Scope 2 emissions will start in 2026 (for 2025 data), with registry inscription voluntary for private firms but mandatory for state bodies. The decree also widens the system to include voluntary registration of "event" footprints for large events (over 1,500 attendees), clarifies the rules for projects that generate carbon-absorption credits within Spain, and lets contracting authorities use verified footprints as environmental criteria in public procurement, nudges that tie disclosure to real-economy incentives.

Madrid has pitched the measure as an implementation step under the 2021 Climate Change and Energy Transition Law, which locks in Spain's climate-neutrality objective for 2050. In parallel, Spain's National Energy and Climate Plan and long-term decarbonization strategy set the trajectory toward a fully renewable electricity system by mid-century, positioning the new decree as a practical bridge between high-level climate goals and company-level emissions obligations.[3]

In practice, the decree modernizes Spain's 2014 voluntary registry and aligns corporate reporting with the EU's direction of travel. Companies must publish the footprint and the plan, while the environment ministry provides standard emission factors and templates to drive comparability. As Spain's full Corporate Sustainability Reporting Directive (CSRD) transposition has been staggered, supervisors have already urged issuers to prepare 2024 sustainability reports in line with CSRD, and to begin aligning subsequent reporting cycles as the transposition is completed, the new decree complements that push rather than replacing it.

The policy sits alongside a broader "climate emergency" agenda. The government has announced plans for a State Agency for Civil Protection and Emergencies with a mandate to provide year-round capacity to cope with fires, floods and heatwaves, signaling that adaptation capacity will rise in step with mitigation. Spain's updated National Energy and Climate Plan aims is to reduce emissions by 32 percent by 2030, and reach 81 percent renewable energy in power generation. The plan is supported by an extensive pipeline of approved renewable-energy projects, alongside substantial public and private investment flows, including funding mobilized through Spain's national recovery strategy.

For companies, the message is clear, if you are in scope of Spain's non-financial disclosure rules, you must:

(1) measure organizational emissions annually using ministry emission factors;
(2) publish the footprint and a reduction plan with quantified targets over at least five years; and
(3) be ready for counterparties, from public buyers to lenders, to treat those disclosures as decision inputs.

Large private entities should also prepare for phased-in Scope 3 expectations in line with EU and national guidance, while central-government bodies must report Scope 3 from 2028. These rules apply to large firms with 250+ employees meeting asset/turnover thresholds or public interest entities.

If this is executed well, the new rules can cut greenwashing risk, normalize comparable metrics across markets, and channel capital into credible decarbonization at a moment when Spain is accelerating both resilience and clean-energy build-out.

> *"Because if we don't want to bequeath our children a Spain that's grey from fire and flames, or a Spain that's brown from floods, then we need a greener Spain."* [4]
>
> **Pedro Sánchez**
> The President of the Government of Spain

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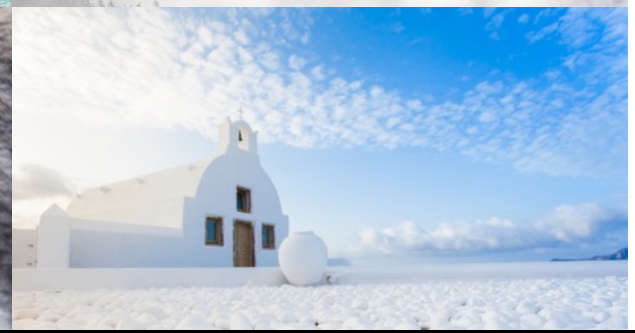
[1] Spain Government. (2025). Royal Decree 214/2025, of March 18, which establishes the registry of carbon footprint, compensation, and carbon dioxide absorption projects, and which sets the obligation to calculate the carbon footprint and to prepare and publish greenhouse gas emission reduction plans.
[2] ESG News (2025). Spain Makes Carbon Reporting Mandatory in New Climate Emergency Plan.
[3] Spain Government. (2021). Law 7/2021: Climate Change and Emergency Transition.
[4] The ESG Institute. (2025). From Decree to Emergency Plan: Spain Bets Big on ESG.

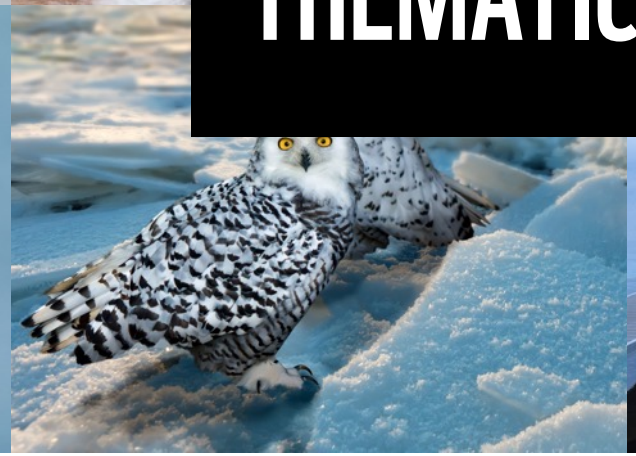
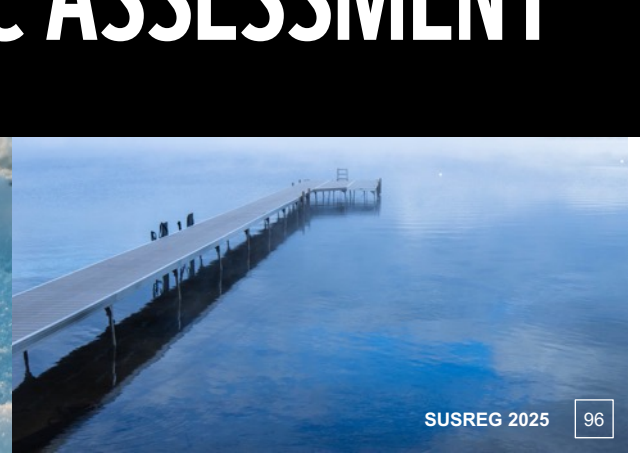








THEMATIC ASSESSMENT

EXECUTIVE SUMMARY TO THE 2025 THEMATIC ASSESSMENT

THEMATIC ASSESSMENT		
4.1	4.2	4.3
DEFORESTATION AND LAND CONVERSION	FRESHWATER	OCEAN & MARINE ECOSYSTEM
Deforestation and land conversion in micro-prudential supervision	Freshwater in micro-prudential supervision	Ocean in in micro-prudential supervision
Deforestation and land conversion in macro-prudential supervision	Freshwater in macro-prudential supervision	Ocean in macro-prudential supervision
Deforestation and land conversion in disclosure	Freshwater in disclosure	Ocean in disclosure
Deforestation and land conversion in monetary policy	Freshwater in monetary policy	Ocean in monetary policy
Deforestation and land conversion in central banks' own portfolio investment	Freshwater in central banks' own portfolio investment	Ocean in central banks' own portfolio investment
Deforestation and land conversion in green taxonomy	Freshwater in green taxonomy	Ocean in green taxonomy

ABOUT THE NEW THEMATIC ASSESSMENT

The new thematic assessment in SUSREG focuses on three nature-related risk channels: deforestation and land-use conversion, freshwater, and ocean & marine ecosystems. These risks are crucial as they affect the functioning of underlying natural systems that provide carbon storage, water regulation, and ecosystem productivity. When pressures on these systems intensify (for example through ecosystem conversion, water resources overexploitation, or degradation of marine and coastal environments) the impacts can transmit to the financial system through credit, market, operational, legal, and other channels. Over time, these disruptions can accumulate and jeopardize the resilience of the financial system and the broader economy.

- Deforestation and land conversion remain one of the leading drivers of biodiversity loss and a major contributor to global greenhouse gas emissions. The clearing and degradation of forests reduce carbon storage capacity, disrupt hydrological systems, and erode the livelihoods of millions of people. Through lending and investment, the financial sector continues to finance activities that directly cause deforestation and land conversion, such as agriculture, infrastructure, and mining, as well as industries that have indirect impacts through their supply chains. Financial institutions also depend on the ecosystem services that these landscapes provide, including climate regulation, water stability, and soil productivity, which are critical for the long-term value of assets and economic resilience. [1]

- Freshwater resources face mounting pressures from overextraction, pollution, ecosystem conversion, and climate-change impacts. Water scarcity and degraded freshwater ecosystems threaten agricultural productivity, human health, and industrial operations. These pressures have moved beyond environmental concerns and now represent a significant source of financial and macroeconomic risk. Water scarcity can reduce asset values, weaken borrower repayment capacity, and disrupt supply chains across multiple sectors. The European Central Bank estimates that about 15% of total economic output in the euro area is at risk from surface water scarcity, illustrating the potential scale of the financial consequences if water resources are not managed sustainably.[2]

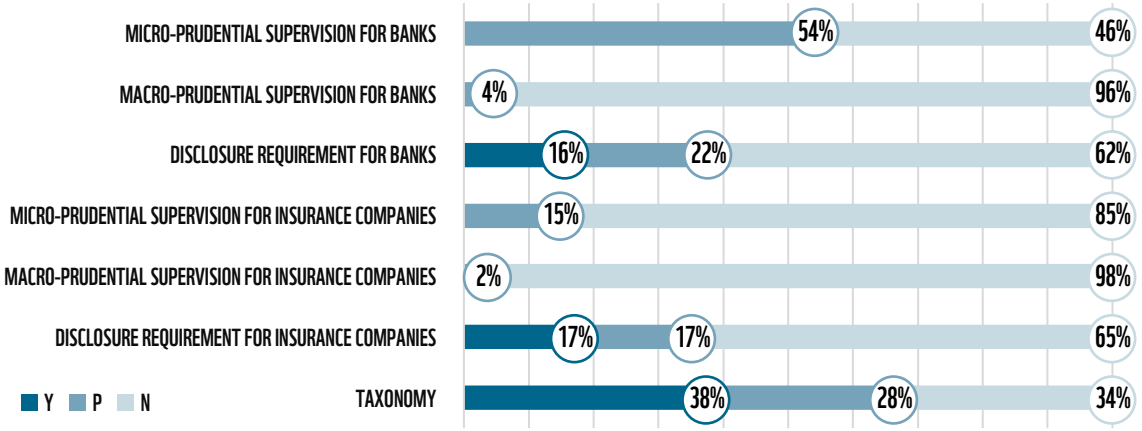
- Ocean health is indispensable for regulating global climate, supporting biodiversity, and providing livelihoods for billions of people. As a major carbon sink, the ocean absorbs a significant share of anthropogenic emissions and regulates temperature and weather patterns. Healthy marine ecosystems also sustain fisheries, coastal protection, and trade routes that support billions of livelihoods worldwide. However, ocean degradation (driven by overfishing, pollution, acidification, and rising temperatures) poses systemic risks to economic and financial stability, particularly as ecological tipping points are approached. Integrating ocean-related risks into financial supervision and policy is therefore increasingly critical.[3]

WWF's Greening Financial Regulation Initiative (GFRI) has issued guidance for central banks and financial regulators on integrating deforestation and land conversion risks, as well as ocean and marine ecosystem risks into supervisory and regulatory frameworks. A guidance note on freshwater risks is planned for publication early next year.

[1] World Wide Fund for Nature. (2024). Deforestation and conversion: an introductory guide for central bankers, financial regulators and supervisors.
[2] World Wide Fund for Nature. (2025). Keeping the global economy afloat.
[3] World Wide Fund for Nature. (2025). Why ocean health matters to central banks and financial regulators.

DEFORESTATION AND LAND CONVERSION

FIGURE 28: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS ON SUSREG THEMATIC ASSESSMENT



Note: The numbers displayed in the graph represent the percentage of countries in the SUSREG scope that do not meet (N), partially meet (P), and fully meet (Y) the SUSREG criteria on the respective indicators.

***Under BCB Resolution No. 140/2021, rural credit will not be granted to: (i) producers who are not registered, or whose registration is canceled or suspended in the Rural Environmental Registry (CAR**); (ii) projects wholly or partially located in Conservation Units, unless the economic activity is in compliance with that Conservation Unit's Management Plan; (iii) projects situated in the Amazon Biome that are: a) located on a property with an embargo in effect due to the economic use of illegally deforested areas, as disclosed by the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA); or b) financed under the National Land Reform Program (PNRA) where the rural credit proponent has restrictions in effect for illegal deforestation, according to records published by the National Institute for Colonization and Agrarian Reform (INCRA). This shows how Brazil incorporates environmental compliance into pre-emptive credit eligibility. Banks must deny funding when official public registries/lists flag risk, creating a binary gate before money flows, not just after-the-fact penalties. The rule applies system-wide across rural lending (including subsidized lines) making enforcement faster, auditable, and harder to evade than generic "illegality bans" found in many jurisdictions.*

Many regulators and supervisors acknowledge deforestation and land-use change as part of the definitions within the broad "environmental risk", but only a few provide further detailed guidance on how financial institutions could identify, measure, or manage these risks. In most cases, the regulatory text remains illustrative rather than operational.

A few authorities have begun to move further in recent years. In Brazil, Banco Central do Brasil (BCB) and the National Monetary Council (CMN) link access to subsidized rural agriculture credit to performance in environmental factors, including checks against deforestation and land-use violations. In the Netherlands, De Nederlandsche Bank (DNB) through the Sustainable Finance Platform has issued practical guidance for financial institutions on managing deforestation risks.

At the macroprudential level, some central banks such as the European Central Bank (ECB) and Banco de México (Banxico), have started assessing financial-sector exposure to nature and biodiversity loss. However, no authority has conducted a systematic, detailed analysis specifically focused on forest-cover change and its financial implications.

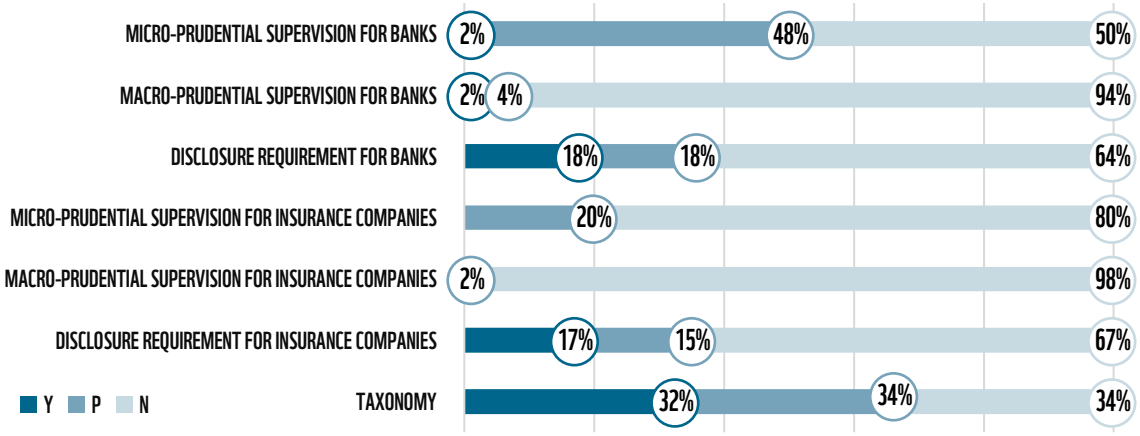
Disclosure expectations are being shaped by the EU's Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS). Under ESRS E4, banks and insurers must disclose their impacts and dependencies on ecosystems, capturing deforestation and land-use change alongside financially material biodiversity risks. In other jurisdictions, disclosure requirements remain high level.

Taxonomies are also beginning to integrate forestry and land-use activities. Several frameworks include eligible forestry-related activities with technical screening criteria such as the EU Taxonomy (afforestation, sustainable forest management, restoration, and conservation), Mexico's Sustainable Taxonomy (ecosystem and biodiversity objectives), and the Singapore-Asia Taxonomy, which is expanding to include nature-related objectives.

The main challenge now is not the lack of recognition of deforestation and land use change risks but a detailed expectation and effective implementation. Supervisors need to operationalize deforestation risk in prudential practice by requiring: (i) location-based risk mapping of counterparties and collateral; (ii) monitor portfolio indicators, such as exposure to forest-risk commodities; (iii) integration of deforestation metrics into credit policy, pricing, and collateral management; and (iv) use the reported impacts and dependencies to inform Supervisory Review and Evaluation Process (SREP), own risk and solvency assessment (ORSA), and other prudential measures..

FRESHWATER

FIGURE 29: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS ON SUSREG THEMATIC ASSESSMENT



Note: The numbers displayed in the graph represent the percentage of countries in the SUSREG scope that do not meet (N), partially meet (P), and fully meet (Y) the SUSREG criteria on the respective indicators.

***In 2025 De Nederlandsche Bank (DNB) updated its cross-sector Guide to managing climate- and nature-related risks for insurers, pension funds, investment firms and institutions, and e-money/payment institutions (banks follow the ECB guide) adding new good practices and explicit nature coverage, including water risks**. Firms are encouraged to treat water scarcity, extreme precipitation, and groundwater level change (with knock-on risks like pile rot and subsidence) as material risk drivers, and to integrate them across strategy, governance, risk management, and disclosures.*

The Guide also prompts scenario thinking (e.g., what if groundwater becomes scarce and water-use regulation tightens?) and encourages assessing impacts on assets, clients, and collateral. The guide highlights good practice where an institution sets a target to achieve a water-neutral portfolio by 2030, alongside a climate target. Progress is tracked using portfolio-level KPIs, for example, water consumption in scarcity areas per €1 million invested. These metrics are then linked to stewardship and portfolio actions, including engagement, exclusions, and financing levers, to reduce absolute water withdrawals in high-stress basins.

Like deforestation, freshwater is being recognized by various jurisdictions, tough mostly as an illustrative example of broader environmental risks, rarely accompanied by detailed requirements. As one of the few concrete expectations on freshwater issues, the Guidelines on Environmental & Social Risk Management (ESRM) for Banks and Financial Institutions in Bangladesh require certain companies to comply with the Environmental and Social Due Diligence (ESDD) checklist for water use and conservation, from which an E&S risk rating will be generated, triggering certain mitigating actions.

On macroprudential supervision, some central banks have assessed exposures to water-related risks. The ECB finds that almost 15% of euro-area value-added is at risk from surface-water scarcity, and ~€1.3tn (≈34%) of loans by 2,500 banks are to sectors highly exposed. The Central Bank of Hungary (MNB) published the results of an assessment of its banking system exposure to climate risk related to water use and polluting sectors. Similarly, Mexico's central bank (Banxico) identified surface water as the most critical ecosystem service for a total of 28 subindustries, highlighting the dependency of the Mexican banking system. However, despite the evidenced macro-criticality of water, macroprudential measures to address this systemic risk remain limited.

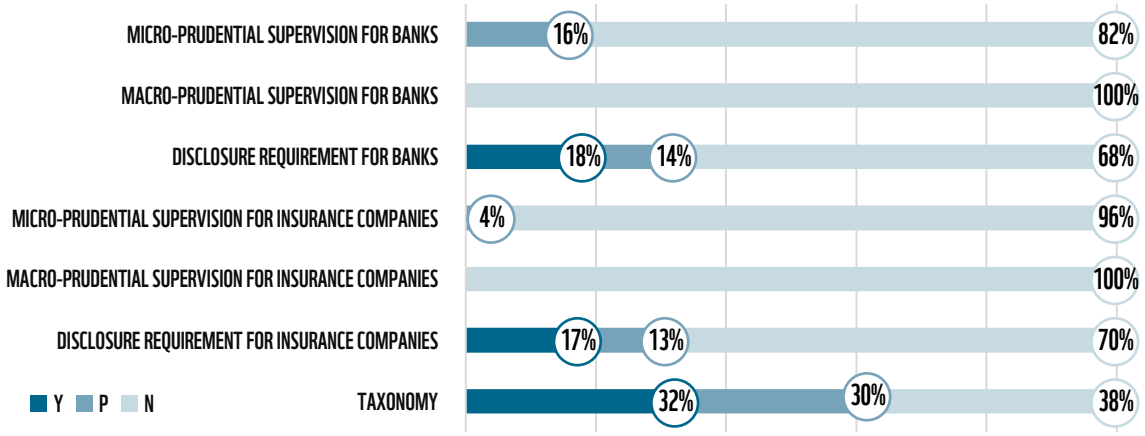
On disclosure, the European Sustainability Reporting Standards (ESRS) E3 already require water-specific reporting. ESRS E3 mandates disclosures on policies (E3-1), actions and resources (E3-2), targets (E3-3), water consumption (E3-4) and anticipated financial effects (E3-5) covering both impacts and dependencies. China's sustainability disclosure standards require enterprises to disclose plans to manage or exit water-intensive businesses as part of their resource allocation, and to report water resource use during the reporting period, including total water consumption, water-use intensity, water conservation targets and measures, and any specific difficulties in water use. In South Africa, the Johannesburg Stock Exchange (JSE) Sustainability Disclosure Guidance encourages listed companies, where material, to disclose water-related metrics, including total water consumption from all areas and from areas with water stress, as well as total water discharge to all areas in megalitres.

Taxonomies increasingly incorporate freshwater ecosystems in their objective and technical screening criteria (TSC). A prominent example is the EU Taxonomy, whose TSC include activities contributing to the "sustainable use and protection of water and marine resources. The Singapore-Asia Taxonomy (Dec 2023) also includes waste & water activities with "green" and "transition" thresholds. Many green taxonomies still focus on climate mitigation and adaptation and do not include freshwater in their objective.

Overall, binding water-related requirements in financial supervision and regulation remain the exception rather than the rule. The logical next step is to provide guidance to financial institutions with actionable measures, including, on how to identify and manage water-related risks that capture broader freshwater ecosystem health in a spatially-explicit and forward-looking manner, prioritizing harmful economic activities implicated in degrading water systems in critical ecosystems (e.g. high water stress catchments).

OCEAN & MARINE ECOSYSTEM

FIGURE 30: AVERAGE ACHIEVEMENT OF 50 COUNTRIES ON SELECT INDICATORS ON SUSREG THEMATIC ASSESSMENT



Note: The numbers displayed in the graph represent the percentage of countries in the SUSREG scope that do not meet (N), partially meet (P), and fully meet (Y) the SUSREG criteria on the respective indicators.

The Value-Based Intermediation (VBI) Sectoral Guides (Malaysia) are regulator-backed, industry-authored playbooks that help banks weave impact-based due diligence into lending. In the Agriculture, Forestry & Fishing guide, the marine sections give a practical, end-to-end approach for fisheries and aquaculture*. They highlight how nutrient-rich runoff (phosphorus, nitrogen, pathogens) can degrade rivers and ultimately the ocean, and outline risks in capture fisheries ranging from encroachment into Marine Protected Areas (MPA) to bottom-trawling damage to benthic habitats and bycatch of non-target species like sea turtles and juvenile fish. For aquaculture, the guide flags escape-driven invasive species, misuse of agrochemicals that harms marine food webs, and poor husbandry that suppresses local species. The guides translate this into lender expectations: robust bycatch mitigation, no MPA encroachment, selective gear and spatial tech to avoid sensitive zones, effluent controls and water-quality monitoring, siting discipline, and contingency plans for storm-related net failures. The guide also directs banks to credible certifications such as Malaysian Good Agricultural Practices (myGAP), Aquaculture Stewardship Council (ASC), and Marine Stewardship Council (MSC) to demonstrate better practice.*

Compared to deforestation or freshwater, ocean issues are the least integrated into micro- and macroprudential supervision, while its integration into taxonomies is at comparable levels.

On micro-prudential supervision, guidance or expectations towards the integration of ocean and marine ecosystem issues are still at a very high level, often only as part of a general consideration or an example of environmental risks and climate impacts in general. In our assessment, no jurisdiction has explicit, mandatory, and detailed requirements to identify, measure, and manage ocean (marine-ecosystem) risks.

Macro-prudential measures and analysis is nascent and usually routed through generic physical-risk work (coastal flooding or sea-level rise) rather than marine ecosystem dependencies.

On disclosure requirement, the European Sustainability Reporting Standards (ESRS) E3 in the EU requires reporting on water and marine resources (policies, actions, targets, consumption, and anticipated financial effects) bringing ocean-related issues into mainstream filings, but only to financial institutions subject to it. Sector standards like GRI 13 (on Agriculture, Aquaculture and Fishing Sectors) and the TNFD's 2025 ocean sector guidance (fishing, marine transportation) add practical depth for companies and financial institutions.

In taxonomy, ocean and marine activities are embedded as part of environmental objective (EO) in the EU Taxonomy. It also sets the technical screening criteria for the EO. Other taxonomies such as from Brazil, China, Colombia, Indonesia, New Zealand, or Thailand taxonomies reference water/marine objectives but lack detailed, marine-specific Technical Screening Criteria (TSC) at this stage. Other taxonomies, such as from Chile, Costa Rica, or Turkey plan to include marine as part of the environmental objective.

A pragmatic next step is to make marine risks progressively more explicit, proportionate, and evidence-based. Regulators could begin by issuing guidance that asks boards to acknowledge material marine exposures, extend Internal Capital Adequacy Assessment Process (ICAAP) or Own Risk and Solvency Assessment (ORSA) to salient coastal hazards and ocean-dependent sectors where relevant, and pilot simple exposure metrics (for example, lending in high coastal-hazard zones). Over time, drawing on lessons from these pilots, authorities could introduce targeted scenario exercises, integrate marine checks into the existing Supervisory Review and Evaluation Process (SREP) modules, and align disclosure expectations with the TNFD framework for consistency.

CHINA'S EXPLORATION IN DEVELOPING A BIODIVERSITY FINANCE TAXONOMY

中国人民银行
THE PEOPLE'S BANK OF CHINA

China is moving ahead with a draft biodiversity-finance taxonomy designed to put the Kunming–Montreal Global Biodiversity Framework into practice and narrow the conservation funding gap. [1] In recent years, authorities have pushed to expand financial support for biodiversity, but progress has been held back by the absence of a unified, scientific, and user-friendly classification framework with quantitative standards, making it hard for diverse capital providers to identify credible activities and assess outcomes.

In 2024, a working group led by the People's Bank of China was established to design a clear, practical classification that helps financial institutions, regulators, and market participants identify and prioritize biodiversity-related investments. The intent is simple: make eligibility unambiguous and steer capital toward projects that protect biodiversity and support the sustainable use of biological resources.

The new work builds on existing foundations. China's "Green Industry Guidance Catalogue" and the "Green Bonds Endorsed Projects Catalogue" already cover, directly or indirectly, aspects of biodiversity conservation within broader green and transition finance. A dedicated biodiversity-finance catalogue is intended to reduce the learning curve for users, harmonize criteria, and improve the efficiency of capital allocation across conservation and sustainable-use activities.

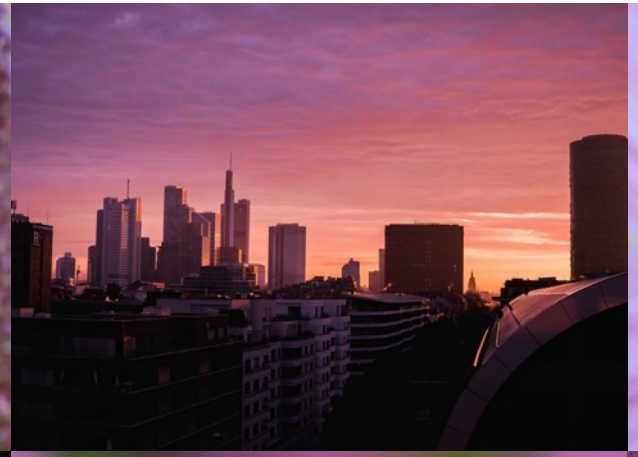
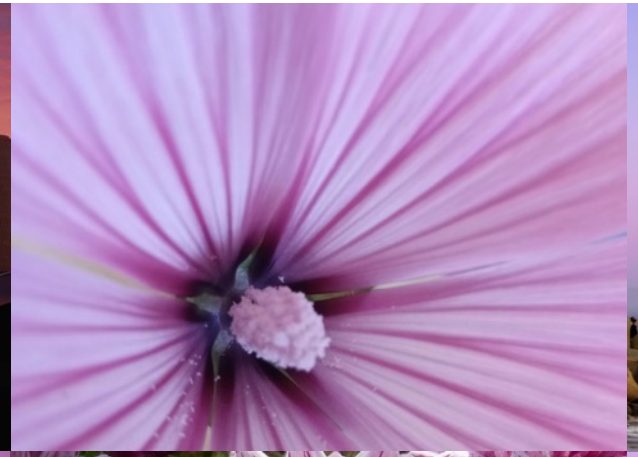
Substantively, the draft organizes activities under four pillars: Sustainable Use of Biological Resource, Protection and Restoration of Ecosystems, Nature-based Solutions, and Other Biodiversity-friendly Activities, covering 19 subcategories and 67 specific activities. To keep the list usable and credible over time, the framework is anchored in six principles: (1) no significant harm, (2) prudent utilization, (3) consistency (with national policy and international goals), (4) risk prevention, (5) transparency and certification, and (6) dynamic adjustment to allow periodic updates as science and practice evolve. These safeguards sit alongside transparent eligibility criteria, documentation requirements, and measurable indicators to support verification and reporting.

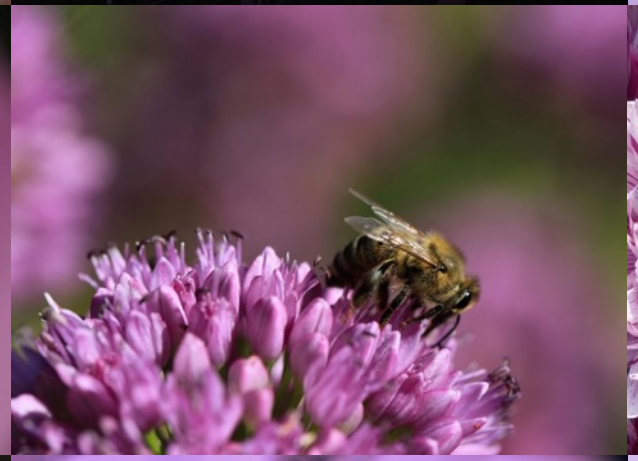
For supervisors and central banks, the taxonomy provides a concrete hook: institutions can map exposures to eligible activities, set targets linked to nature outcomes, and disclose progress in ways that can be reviewed and compared, complementing existing green and transition taxonomies rather than reinventing disclosure systems.

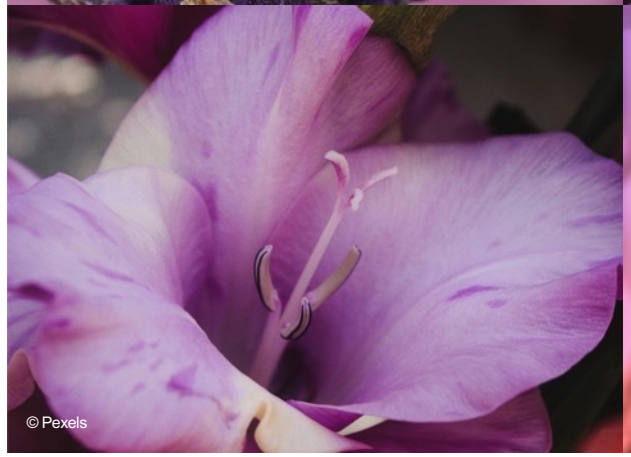
China's approach also recognizes the technical hurdles. The biggest challenge in compiling the catalogue is defining and measuring biodiversity conservation activities in a way that is rigorous yet practical. Biodiversity spans species, ecosystems, and genetic diversity, and robust quantification and monitoring often require specialist methods and data. Regional differences in ecological characteristics and conservation needs further complicate the creation of a single measurement standard. The current focus, therefore, is on refining actionable, affordable, and ecologically grounded performance indicators, so that projects can be assessed consistently without imposing prohibitive costs on implementers.

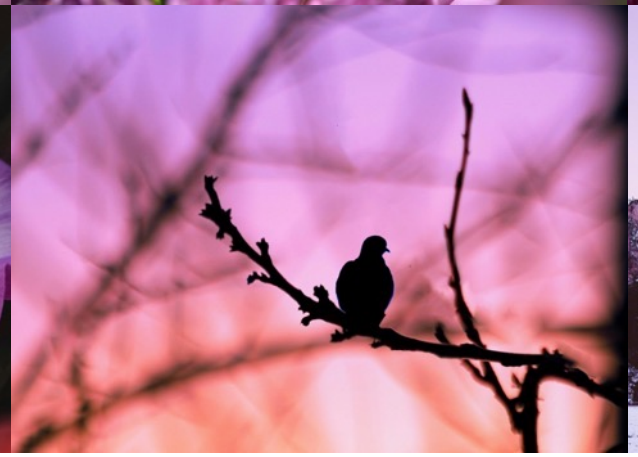
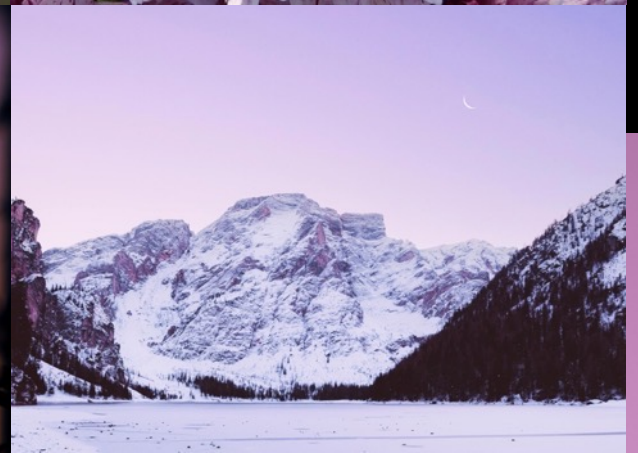
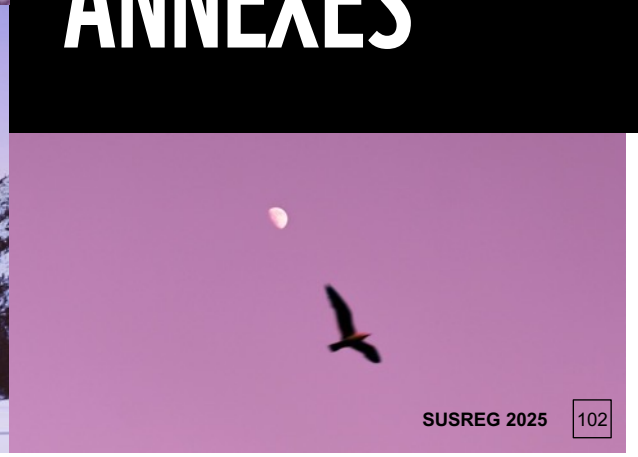
Taken together, the initiative offers a useful model for jurisdictions seeking to integrate biodiversity into sustainable-finance frameworks. By clarifying what counts as biodiversity finance, setting out principles and indicators, and planning for iterative improvements, China's taxonomy can help mobilize public and private capital toward nature-positive investments and support the shared goal of halting and reversing biodiversity loss by 2030[2], while emphasizing the importance of multi-stakeholder collaboration, targeted capacity building, and continuous refinement of the taxonomy.

[1] Wang, X. (2025) China's Exploration in Developing Biodiversity Finance Taxonomy [Webinar]. Sustainable Banking and Finance Network (SBFN).
[2] Convention on Biological Diversity. (2022). 2030 Targets (with Guidance Notes).

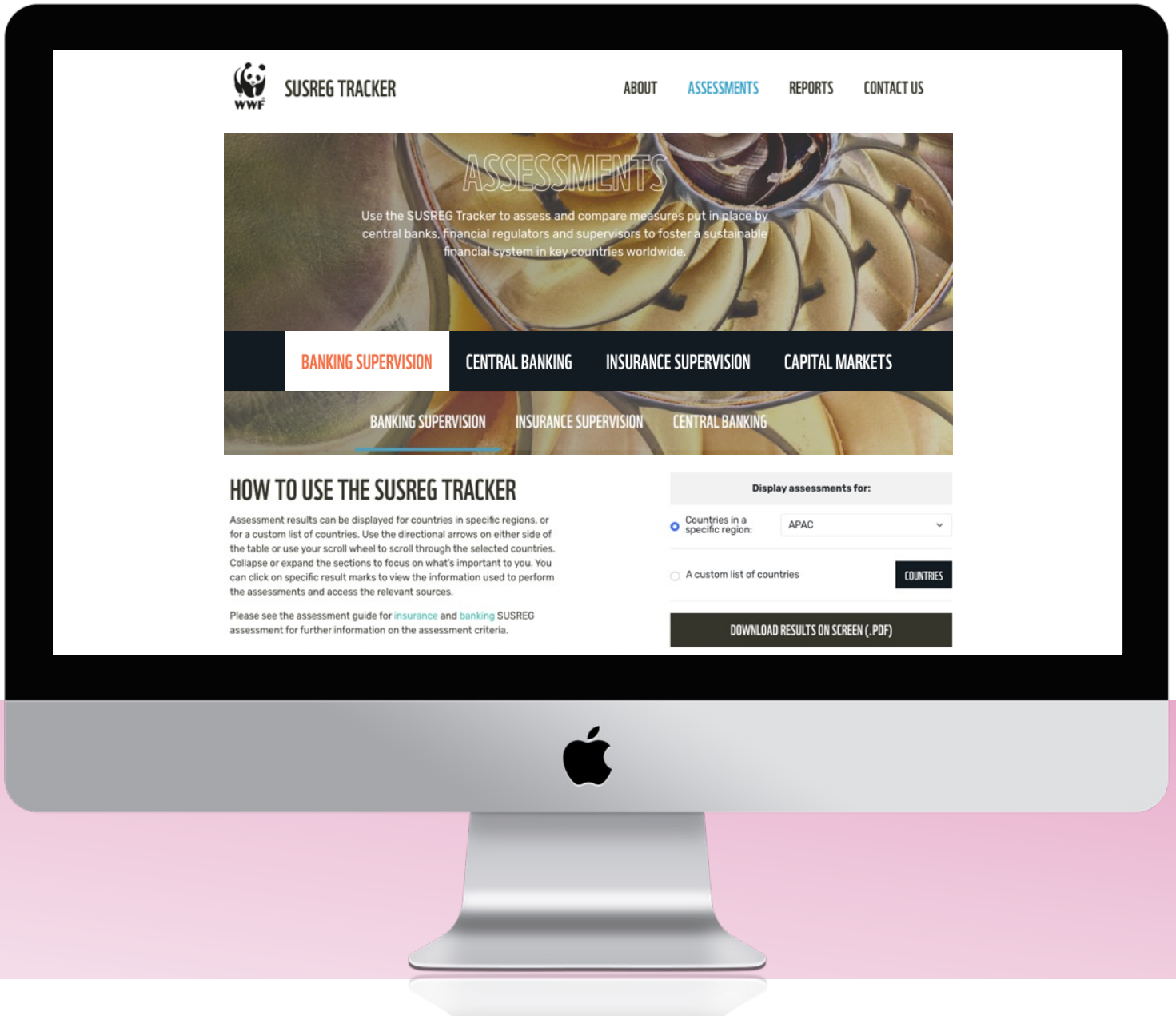



ANNEXES

ANNEX 1:
SUSREG TRACKER WEBSITE

susreg.panda.org



ANNEX 2: INDICATORS WEIGHTAGE

BANKING SUPERVISION			WEIGHTAGE	
SUPERVISION	MICRO-PRUDENTIAL SUPERVISION	SCOPE	6.1%	77.2%
		STRATEGY & GOVERNANCE	8.1%	
		POLICIES & PROCESSES	10.2%	
		PORTFOLIO RISKS & IMPACTS	10.2%	
		CAPITAL REQUIREMENT	10.2%	
		LIQUIDITY REQUIREMENT	4.1%	
	DISCLOSURE & TRANSPARENCY		9.6%	
	MACRO-PRUDENTIAL SUPERVISION		11.7%	
	MONITORING & ENFORCEMENT		7%	
LEADERSHIP & INTERNAL ORGANIZATION				8.1%
ENABLING ENVIRONMENT				14.7%
TOTAL				**100.0%**

INSURANCE SUPERVISION			WEIGHTAGE	
SUPERVISION	MICRO-PRUDENTIAL SUPERVISION	SCOPE	6.6%	74.8%
		STRATEGY & GOVERNANCE	9.2%	
		POLICIES & PROCESSES	9.7%	
		PORTFOLIO RISKS & IMPACTS	10.2%	
		CAPITAL REQUIREMENT	10.2%	
	DISCLOSURE & TRANSPARENCY		10.2%	
	MACRO-PRUDENTIAL SUPERVISION		11.7%	
	MONITORING & ENFORCEMENT		7.7%%	
LEADERSHIP & INTERNAL ORGANIZATION				9.2%
ENABLING ENVIRONMENT				15.3%
TOTAL				**100.0%**

CENTRAL BANKING		WEIGHTAGE
MONETARY POLICY		60.5%
LEADERSHIP & INTERNAL ORGANIZATION		39.5%
TOTAL		**100.0%**

CAPITAL MARKETS			WEIGHTAGE
ASSET MANAGEMENT SUPERVISION	ENTITY	18.33%	40.00%
	PRODUCT	21.67%	
ISSUER SUPERVISION	LISTED BONDS	15.00%	36.67%
	LISTED EQUITIES	21.67%	
MARKET INFRASTRUCTURE			23.33%
TOTAL			**100.0%**

We apply indicator weighting in the SUSREG annual report to balance coverage across policy areas, so no single topic is over- or under-represented. It also aims to reflect differences in prudential impact by assigning higher weights for measures with greater impact (e.g., capital requirements, key macroprudential tools) and lower weights to largely procedural requirements.

The purpose is to assess each country's own progress over time, not to rank jurisdictions. SUSREG is not a ranking tool, weighted scores are used to track within-country trajectories, highlight constraints, and prioritize next steps, with full transparency of weights and methods.

WWF, 28 rue Mauverney,
1196 Gland, Switzerland.
Tel. +41 22 364 9111
CH-550.0.128.920-7

For contact details and further information, please visit our international website at wwf.panda.org

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