



2024 SUSREG ANNUAL REPORT

AN ASSESSMENT OF SUSTAINABLE FINANCIAL
REGULATIONS AND CENTRAL BANK ACTIVITIES





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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.

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“Over the past 50 years (1970-2020), the average size of monitored wildlife populations has shrunk by 73%, as measured by the Living Planet Index. [...] It is no exaggeration to say that what happens in the next five years will determine the future of life on Earth.”

WWF LIVING PLANET REPORT 2024



EXECUTIVE SUMMARY

Money continues to flow into activities that contribute to the nature and climate crises, with direct payments, tax incentives, and subsidies that worsen climate change, biodiversity loss, and ecosystem degradation estimated to total nearly US\$7 trillion annually^[1]. Redirecting finance away from harmful activities and toward activities that contribute to the global goals on nature, climate and sustainable development is essential for ensuring a thriving planet for generations to come.

For this to happen rapidly, at scale and in an orderly fashion, the mobilization of central banks, financial regulators and supervisors is crucial. Building on its experience of working with a wide range of financial sector stakeholders, WWF has developed the Sustainable Financial Regulations and Central Bank Activities (SUSREG) framework to assess the integration of environmental & social considerations in regulatory and supervisory practices, as well as in central banking activities and other measures that support the redirection of financial flows towards more sustainable practices.

This year marks the fourth edition of our in-depth assessment since its inaugural publication in 2021. The assessment's coverage has expanded from 47 jurisdictions in 2023 to 52 in 2024^[2]. The assessment and recommendations of this report, serve as an interactive platform for WWF, central banks, and financial supervisors worldwide to discuss gaps, good practices, challenges, and plans to ensure that the financial sector fully accounts for climate- and nature-related risks and opportunities.

The next five years are critical for the future of our planet. While global agreements and solutions exist to set nature on a path to recovery by 2030, current actions fall far short of what's needed. Central banks and financial regulators must step up by integrating nature-related risks into financial frameworks, enforcing stronger regulations to ensure the financial system actively supports the protection and restoration of our natural environment.

[1] WWF, *Living Planet Report 2024*.

[2] The complete list of countries featured in the 2024 assessment can be found in Annex 1 of this report. Please note that the 2024 SUSREG assessment only includes documents published by the 31st July 2024; any documents issued after the cut-off date were not considered in the assessment.

The following are the key findings from the SUSREG 2024 assessment:

- From 2021 to 2024, **banking supervision** showed the most progress, with an 18% increase in climate-related measures. **Insurance supervision** followed closely, improving by 17% since 2022. However, monetary policy and **central banking activities** has stagnated, with only a modest 4% increase.
- Despite these progress, **most financial regulatory frameworks still lack critical elements**. Nature-related risk drivers, such as deforestation, land conversion, freshwater management, and ocean and marine life protection, are insufficiently addressed. Additionally, key policy instruments such as target-setting and capital requirements remain underutilized.
- High-income countries**, having greater resources and a historical responsibility for emissions are showing stride in climate commitment with 20 out of 29 high-income countries align with more than 50% of SUSREG's climate criteria in banking supervision, however 14 of them shows less than 50% alignment on nature-related supervision criteria.
- Although climate issues have received the most attention, **even among countries with net-zero targets, 37% of them exhibit weak climate financial supervision**, meeting less than 50% of SUSREG's climate criteria. This highlights an uneven playing field across different jurisdictions.
- Nature related risks** also pose significant challenges in banking supervision, as 31 out of 50 countries fail to align with more than 50% of SUSREG's environmental criteria. Moreover, **7 of the top 10 biodiversity hotspot nations** are lagging in banking supervision for nature-related risks, and all 10 are falling short in integrating these risks into their insurance supervision.
- Social risks**, while acknowledged across financial regulation, remain inadequately managed. Alignment with SUSREG social criteria is alarmingly low, with an average of only 32% for banking supervision and 27% for insurance supervision, underscoring the need for more comprehensive action from all stakeholders.
- On monetary policy and central banking activities**, central banks have yet to meaningfully integrate climate and environmental considerations into **monetary policy tools**, but they are beginning to phase out harmful assets and enhance portfolio disclosures with a focus on climate issues.
- Additionally, the **countries covered have begun to establish the enabling environment** necessary for transforming financial systems and the broader economy. Approximately 52% of these countries have implemented a sustainable taxonomy, 20% are in the process of developing one, and 36% now require corporations to adopt climate transition plans.

In line with our commitment to net-zero and nature-positive outcomes, the first chapter provides key recommendations for central banks, financial regulators, and stakeholders to drive meaningful change. The report also highlights good practices, offering valuable examples for central banks and supervisors to adapt and implement within their national contexts.

The full assessment results are available at SUSREG interactive website at: <https://www.susreg.panda.org/>



RECOMMENDATIONS



FINANCIAL SUPERVISION AND REGULATION

01

Include external impact considerations into prudential regulation and supervisory expectations: Double materiality, which accounts for both the sustainability risks faced by financial institutions and their external impacts, is gaining traction in various sustainability disclosure frameworks. However, not all frameworks adopt this perspective—such as the ISSB, which remains focused solely on financial materiality. Despite advancements, double materiality is still largely absent from prudential regulation and supervisory expectations. This gap overlooks the fact that unmanaged negative external impacts from the activities of banks and insurers—such as financing or underwriting thermal coal and fossil fuel expansion—inevitably translate into financial risks. These risks can emerge through micro-level channels like reputational damage and litigation or macro-level channels such as the escalation of physical risks and their systemic repercussions. To address this, all central banks, financial regulators, and supervisors should adopt a double materiality approach in the financial supervision. Effectively managing long-term risks requires considering external impacts, even if this is not explicitly outlined in their mandates.

02

Mandate climate and nature target setting and transition plans for financial institutions: Financial supervisors should mandate financial institutions to set credible, science-based Net Zero and Nature Positive targets, including ambitious short-, medium- and long-term net zero and nature positive targets goals aligned with the Paris Agreement and the Global Biodiversity Framework. Supervisors should mandate financial institutions to develop and publicly disclose their transition plans. Additionally, they should provide clear guidance and support to help these institutions create and implement comprehensive climate and nature transition strategies across all asset classes and sectors. These plans should lead to an increased flow of financing toward Net Zero and Nature Positive activities through both innovative and existing financial mechanisms while avoiding environmentally harmful financing, such as deforestation and land conversion. Moreover, financial supervisors must actively assess and address greenwashing risks associated with the disclosure of these transition plans. By ensuring the integrity and transparency of these disclosures, supervisors can help maintain market confidence and drive genuine progress toward sustainable finance.

03

Monitor the alignment of financial flows with 1.5 C pathway and Global Biodiversity Framework: Financial supervisors should actively monitor and ensure that private financial flows are aligned with 1.5°C pathway, adhering to a trajectory consistent with low greenhouse gas emissions and climate-resilient development, as well as with nature positive pathway consistency with the Global Biodiversity Framework. Private financial institutions are expected to deploy capital for climate and nature finance – in particular for climate adaptation and natural climate solutions - including developing new innovative financial schemes and accelerating the deployment of public-private blended finance vehicles or instruments.

04

Develop approaches to measure nature-related risks and impacts: While established reference standards like the Greenhouse Gas (GHG) Protocol and the Partnership for Carbon Accounting Financials (PCAF) have set benchmarks for carbon accounting and the assessment of greenhouse gas emissions in financial activities, progress in measuring nature-related risks and impacts remains limited. Central banks and financial supervisors have increasingly adopted climate scenario analysis and stress testing, but similar advancements for nature-related risks—such as those related to water, deforestation, biodiversity, and ecosystem services—are still in their infancy.

Private initiatives, including the Taskforce on Nature-related Financial Disclosures (TNFD), Encore, and WWF's [Biodiversity Risk Filter](#) and [Water Risk Filter](#), have begun to address these challenges. However, central banks and financial supervisors should take a more proactive role in advancing and shaping these methodologies. Nonetheless, it is important to recognize that even the most sophisticated risk methodologies and scenario analyses may not fully capture the complex and interconnected nature-related risks, impacts, and dependencies faced by the financial system. Therefore, central banks and financial supervisors should also require financial institutions to adopt a precautionary approach, ensuring that nature-related considerations are integrated into decision-making processes even in the face of uncertainty. This proactive stance will help safeguard both financial stability and environmental sustainability in the long term.

FINANCIAL SUPERVISION AND REGULATION cont.

05

Expand, clarify, and harmonize sustainability disclosure requirements: In most jurisdictions, sustainability disclosure requirements and ESG-related prudential regulation are progressing in parallel but at different speeds. Disclosure requirements are generally more advanced, and there is a lack of explicit link and harmonized frameworks between the two areas. Globally, the fragmented landscape of sustainability disclosure standards has started to consolidate, but major inconsistencies remain. On the one hand, the IFRS Foundation's International Sustainability Standards Board (ISSB) incorporates an increasing number of preexisting standards such as Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD) and now the UK Transition Plan Taskforce (TPT). The ISSB is partly but not fully interoperable with the more ambitious European Corporate Sustainability Reporting Directive (CSRD) and its European Sustainability Reporting Standards (ESRS), whose scope, level of detail and extraterritoriality are a game changer for the companies who apply it. More ambitious and coordinated policies are needed to turn the growing number of sustainability disclosure requirements into a consistent set of concrete incentives for financial institutions to support the transition.

07

Explore the potential and enabling factors of mandatory insurance: In recent years, natural disasters like floods and wildfires have increased in frequency and severity, a physical trend expected to continue. Meanwhile, technological advancements—such as AI, Big Data, satellite observation, and geolocation—have enabled insurers to develop increasingly individualized risk assessments. However, this trend risks undermining the foundational principle of insurance: mutualization. As a result, the affordability and even insurability of certain risks are being threatened, particularly in vulnerable regions, as demonstrated by the wildfire situation in California.

To address this growing challenge—which could impact both policyholders and financial stability—policymakers, central banks, and financial supervisors should explore the potential for mandatory insurance covering selected property and liability risks (e.g., environmental pollution). Additionally, they should investigate and promote the enabling factors necessary to ensure the long-term viability of such mandates. These factors include systematic risk prevention measures, the development of resilient rebuilding standards, and the use of Public-Private Partnerships or risk-pooling facilities for high-risk, hard-to-insure areas.

06

Address greenwashing risks in the financial sector: To mitigate the growing risk of greenwashing within financial institutions (FIs), a proactive and multi-layered approach is essential. The financial sector should prioritize transparency and the integration of sustainable practices into core business operations, moving beyond superficial initiatives. Some leading FIs promote sustainability through philanthropic efforts while failing to embed climate and nature considerations into their core business model including lending, investing, and underwriting activities. To address this, regulatory bodies must enforce stringent reporting standards that require institutions to demonstrate how their sustainability commitments are operationalized and linked to their core business. This includes mandating FIs to transparently disclose not only the percentage of their portfolio classified under sustainable taxonomies but also those classified as unsustainable. This would allow the public to assess how much financial capital is being directed towards both green and harmful activities, fostering greater accountability and meaningful action.

08

Ensure the effectiveness of sustainable finance regulation through proactive supervisory enforcement and external assurance: The SUSREG framework and its indicators primarily measure the existence and content of sustainable finance regulation, rather than its actual effectiveness and implementation. However, any set of rules is only as good as the degree to which they are applied. While we recognize that most supervisory action and dialogue takes place outside the public eye, central banks and financial supervisors should publicly share their general approach to enforcement and how they will act against financial institutions that do not align with their supervisory expectations (such as warning letters, fines etc.). They should also report on the progress of financial institutions in meeting these expectations, and we introduced this year two new indicators to measure this. In parallel, requirements to seek external assurance or audit of climate and sustainability disclosures also constitute a key indirect enforcement mechanism, and an increasing number of jurisdictions are requiring it or have announced their intention to do so.



MONETARY POLICY AND INTERNAL LEADERSHIP BY CENTRAL BANKS AND FINANCIAL REGULATORS

01

Integrate climate, environmental, and social considerations into the allocation of both monetary and non-monetary portfolios and ensure transparent disclosure of the impacts:

It is crucial for central banks to adopt sustainable investment approaches for their balance sheets and to green their monetary policies, setting a strong example for the financial sector. This involves integrating environmental criteria into the assets held by central banks and applying these criteria across various monetary policy tools. Specifically, this means incorporating climate change and other environmental considerations into the assets held for monetary policy purposes, the conditionality and collateral accepted for lending facilities, and other related measures. Strategically, central banks must also develop plans to ensure their monetary policy portfolios—such as those related to asset purchases and foreign reserves—are aligned with net-zero and nature-positive targets by 2050.

In addition to these efforts, central banks can further lead by example through transparent disclosure of the climate and nature impacts associated with their monetary and non-monetary policy portfolios. Aligning these disclosures with frameworks such as the Task Force on Climate-related Financial Disclosures (TCFD), the Taskforce on Nature-related Financial Disclosures (TNFD), and relevant taxonomies is particularly important.

02

Central banks should consider establishing Targeted Long-Term Refinancing Operations (TLTRO) programs specifically dedicated to supporting climate and nature-positive outcomes:

These programs should integrate both climate and nature-related considerations, drawing on lessons from existing frameworks like the Carbon Emission Reduction Facility (CERF) in China and align with internationally recognized transition finance standards and taxonomies. To qualify, financial institutions must develop and disclose comprehensive transition plans that address both climate and biodiversity impacts. The program should also require robust due diligence to ensure financing does not support environmentally harmful activities, as outlined in frameworks like the WWF’s roadmap. Additionally, central banks could differentiate refinancing rates based on the “green performance” of banks, incentivizing those with stronger environmental commitments. Prioritizing SMEs within these TLTRO programs would enhance green financial inclusion, supported by credit guarantees for higher-risk ventures. Regular reviews should be conducted to optimize resource allocation, ensuring the most effective support for sustainable economic transitions.

03

Central Banks and Financial Regulators to lead by example by setting climate and nature target as well as detailed roadmap to achieve them:

WWF, alongside other organizations and thought leaders, urges financial regulators, central banks, and supervisors to use all available means to address the dual climate and nature crises^[1]. This includes incorporating the goals of the Kunming-Montreal Global Biodiversity Framework into their mandates. This is done by incorporating new nominal anchors to limit global warming to 1.5°C, achieving net-zero greenhouse gas emissions by 2050, and fully recovering biodiversity by 2050. To lead by example, they should publicly adopt a precautionary approach towards climate change and biodiversity loss, committing to preventive and pre-emptive measures.

In doing so, central banks and regulators should establish and communicate clear, detailed roadmap and transition plans with quantifiable climate and biodiversity targets for 2025, 2030, 2040, and 2050. These plans must encompass all aspects of central banking, financial regulation, and supervisory activities, providing forward guidance to steer financial markets towards a net-zero and nature-positive future. By offering clarity and setting a strong example, central banks and regulators send a strong signal to steer financial markets towards a sustainable and resilient future.



[1] WWF, *Call to Action to Ensure Transition to a Net Zero and Nature Positive Economy*, 2022.

ENABLING ENVIRONMENT

01

Policymakers should broaden the mandate of Central Banks and Financial Regulators to include climate and nature-positive goals: While climate and environmental risks already pose threats to financial and price stability, the transition towards a carbon-neutral and nature-positive economy is not clearly stated in the mandates of some central banks and financial regulators. In these cases, policymakers should adapt the mandates to explicitly incorporate support for climate and biodiversity objectives. Without a clear directive, these institutions may lack the authority to prioritize environmental goals within the financial system. Expanding their mandates allows central banks and regulators to systematically integrate environmental considerations into monetary policy, financial supervision, and regulation. This alignment with international agreements like the Paris Agreement and the Global Biodiversity Framework ensures the nation's commitment to global climate and biodiversity objectives. Failure to include these directives could leave the financial sector misaligned with sustainability goals, slowing the green transition and increasing vulnerability to climate-related financial shocks.

02

Governments and international standard setters should synergize efforts to address both climate and nature risks: Climate change and Nature loss represent challenges that are global in nature and require coordinated actions across countries. The lack of consistent approaches and coordinated actions could lead to systemic risks for financial markets and the global economy. Central banks and financial supervisors are already coordinating their effort in different instances, but the role of governments^[1] and international standard setters^[2] is crucial to ensure harmonization, consistency and effectiveness of climate and nature related risks mitigation. Governments should align and synergize implementation plans from the climate and biodiversity domains—such as Nationally Determined Contributions (NDCs) and National Biodiversity Strategies and Action Plans (NBSAPs)—to maximize societal benefits while setting a clear direction for businesses and the financial sector. In ensuring harmonization and standardization of disclosure, developing consistent regulatory standards that integrates climate and nature, and fostering global coordination, international standard setters can give the transition of our economies the scale and speed it needs to strengthen financial stability in the long term and achieve our global sustainability goals.

03

Policymakers should develop science-based unsustainable and transitional taxonomies and work together to promote harmonization between different sustainable taxonomies around the world: Developing taxonomies that identify environmentally harmful activities is essential for enhancing transparency and accountability in the financial sector. By requiring financial institutions to disclose their lending and investment activities based on these taxonomies, stakeholders can better understand the extent to which funds are still being directed toward harmful practices. This transparency is key to redirecting capital away from harmful activities and encouraging a shift toward sustainability. Sustainable taxonomies should also help identify transitional activities that require financing to adapt and transition to more sustainable business models.

Additionally, promoting the harmonization of sustainable taxonomies on a global scale is vital for ensuring consistency across borders. Currently, the landscape of taxonomies is fragmented, with significant challenges arising from the lack of comparability between regions and sectors. The absence of global consensus and coordination on criteria, indicators, and thresholds for measuring sustainability exacerbates this issue. An activity deemed sustainable in one jurisdiction may not be recognized as such in another or may be subject to varying levels of scrutiny. This lack of harmonization not only impedes efficient cross-border capital flows but also creates confusion in the market. In the last few years, there has been growing initiatives on this including the China-Singapore and EU-China common ground taxonomy.

[1] Including the G20.

[2] Including the Financial Stability Board (FSB), Coalition of finance ministers, The Basel Committee on Banking Supervision (BCBS), and the International Association of Insurance Supervisors (IAIS)

04

Governments should design national sectoral pathways that outline clear, science-based strategies for each sector to achieve net-zero emissions and biodiversity goals: To drive meaningful progress toward net-zero emissions, policymakers should make sectoral pathways that serve as a basis for companies to develop transition plans at the individual company level. National sectoral transformation plans must be comprehensive and detailed, offering a clear roadmap for each sector's transition to net-zero emissions by mid-century. These plans should outline specific milestones, timelines, and responsibilities, ensuring that all sectors are aligned with the overarching goal of reducing emissions. Policymakers should regularly update sector-specific abatement potentials and address residual emissions, ensuring that pathways remain aligned with the latest developments.

05

Policymakers should examine and facilitate various finance interventions for sea-, water- and landscape^[3] needs: Sub-optimal landscape financing often occurs when opportunities are missed or when the right set of complementary solutions is not deployed. Since landscapes—including terrestrial, coastal, and marine environments—are interconnected systems, they require holistic and integrated approaches to financing. Fragmented or sector-specific financing approaches can lead to inefficiencies and diminished outcomes. Policymakers play a crucial role in coordinating these financial interventions, fostering synergies among initiatives, and ensuring that investments are strategically aligned to reinforce one another. This coordinated approach not only optimizes the use of resources but also enhances the overall impact on environmental sustainability and resilience.

06

Governments should establish a suitable policy and regulatory framework that supports a just transition to net zero: Governments, in cooperation with relevant industries and trade unions, must ensure that social, financial and technical support is provided to those who might be affected by policies and measures to combat climate change particularly on workers, communities, and industries that are currently dependent on high-carbon activities. The initiative includes reskilling and upskilling programs to help workers transition to new jobs in the green economy, financial assistance to ease the economic burden of the transition, and investment in community development to ensure that all regions benefit from the shift to net zero.

^[3] A landscape is a socio-ecological system that consists of natural and/or human-modified ecosystems, and which is influenced by distinct ecological, historical, economic and socio-cultural processes and activities. Read more here <https://forestsolutions.panda.org/approach/sustainable-landscapes>





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