



# 2023 SUSREG ANNUAL REPORT

AN ASSESSMENT OF SUSTAINABLE FINANCIAL  
REGULATIONS AND CENTRAL BANK ACTIVITIES





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Federal Ministry  
for the Environment, Nature Conservation,  
Nuclear Safety and Consumer Protection



INTERNATIONAL  
CLIMATE  
INITIATIVE

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WWF is one of the world's most respected and experienced conservation organisations, 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, capitalising 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. More info at: [panda.org/gfr](http://panda.org/gfr)  
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# EXECUTIVE SUMMARY

This year marks the third edition of our in-depth Sustainable Financial Regulations and Central Bank Activities (SUSREG) assessment since its inaugural publication in 2021. The SUSREG methodology is the result of numerous strategic engagements and cross-fertilization of technical knowledge with central banks, financial supervisors, expert bodies and WWF's network of national offices over the years.

The assessment and its recommendations represent an interactive platform for WWF and central banks and financial supervisors across the world to discuss gaps, good practices, challenges and future plans to ensure that the financial sector fully accounts for climate- and nature-related risks and opportunities. As a global science-based conservation organization, we believe in "together possible". We support the mandate of central banks and financial supervisors as the financial and economic driving force toward a net zero, nature-positive<sup>[1]</sup> and socially equitable economy.

The assessment indicators have been extended this year to cover just transition, central bank phase-out plans, water-related risks, the availability of SME guidelines, and issuance of sovereign sustainability bonds. The assessment has expanded from 44 countries in 2022 to 47 in 2023, adding Turkiye, Slovenia and Paraguay into the assessment. The full list of countries covered by the 2023 assessment can be found in Annex 1 of this report. Please note that the cut-off date for the 2023 SUSREG assessment is the 31st August 2023, documents issued after this date were not reflected in the assessment.

[1] Nature-positive is defined as halting and reversing nature loss, measured from 2020 levels, by increasing the health, abundance, diversity, and resilience of species, populations, and ecosystems so that by 2030 nature is visibly and measurably on the path of recovery.

While notable progress has been made by several central banks and financial supervisors, key gaps remain with uneven level and pace of regulatory and supervisory implementation based on the following key findings:

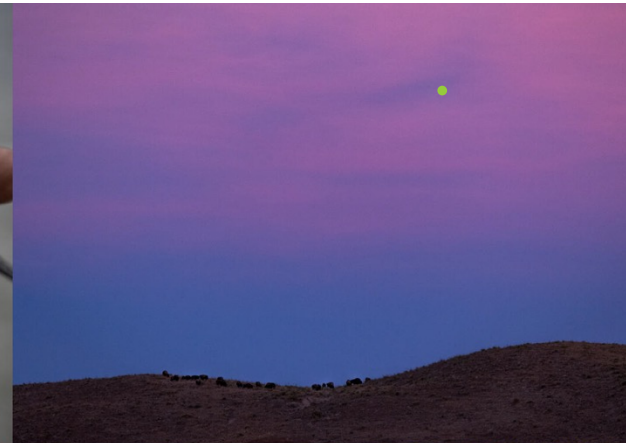
- Regulations or supervisory expectations on sustainable banking have been issued by 67% of all countries in scope in 2023, compared to 62% in 2022. Meanwhile, the number has remained unchanged at the 62% level for insurance supervision.
- The current focus remains primarily on climate. Broader environmental and social issues are falling behind in banking & insurance supervision and central banking activities.
- A staggering 68% of high-income countries have yet to adopt adequate climate and environmental banking supervision policies
- 20 countries with net-zero targets still have notably weak climate banking supervision policies with less than 50% fulfilment of SUSREG criteria.

- Some of the highest emitting countries aligned with less than 50% of the SUSREG climate-related banking & insurance supervision criteria, a stark contrast to their significant carbon emissions.
- Banking & Insurance supervision are falling short in almost all countries, including the most mega-biodiverse countries in the Asia-Pacific and Latin America, resulting in high exposure to nature-related risks.
- Out of 45 central banks in scope, only 8 have shown commendable progress in integrating climate risks into their monetary policy and central banking activities.

In line with our broader, long-term efforts to deliver net-zero and nature-positive outcomes, we propose key recommendations for central banks, financial regulators, and other relevant stakeholders in the first chapter.

The full assessment results are available at SUSREG interactive website at: <https://www.wwf.sg/susreg/assessments/>





# RECOMMENDATIONS



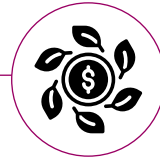


# SUSREG 2023 KEY RECOMMENDATIONS

Building on our Roadmap for a climate safe and nature positive economy that recommends central banks and financial supervisors to add new nominal anchors alongside existing inflation targets, namely: the 1.5°C global warming ceiling which requires that GHG emissions are reduced to net zero by 2050 and a qualitative target of fully recovering and restoring biodiversity by 2050, WWF urges central banks, financial supervisors and regulators to the following recommendations.

"The risk of not delivering on our mandate is real if we don't take climate and nature into consideration. Preserving price stability means preserving climate and nature stability. It is our mandate. It is our culture. Unsere Stabilitätskultur."

FRANK ELDERSON, MEMBER OF THE EXECUTIVE BOARD AND VICE-CHAIR OF THE SUPERVISORY BOARD OF THE EUROPEAN CENTRAL BANK



01

**Publish own transition plans for a low-carbon and nature-positive economy** that are transparent and measurable, and encompass all central banking, financial regulation, and supervision activities.



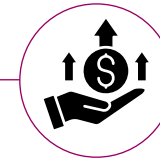
02

**Apply a precautionary approach using all micro and macro prudential supervision tools available.** Instead of waiting for the perfect data and models, financial supervisors need to prioritize preventive and impactful measures in the face of uncertain and potentially catastrophic environmental threats.



03

**Utilize their monetary policy toolkit to address risks stemming from environmental and social issues while phasing-out the most harmful sectors from their portfolios.**



04

**Impose higher capital requirements to financial institutions' lending, investing and insuring companies with always environmentally-harmful activities.**

The complete set of recommendations can be found in the following pages.

# INCORPORATE CLIMATE AND NATURE RISKS INTO CENTRAL BANKS AND FINANCIAL SUPERVISORS' OWN OBJECTIVE AND STRATEGY

01. **Officially set science-based, climate- and environmental-related objectives:** Central banks and financial supervisors should officially define a 1.5°C pathway as part of their objectives, underpinned by a plan of reaching net-zero CO<sub>2</sub> emissions of the economy by 2050. Central banks should also define a 'full biodiversity recovery by 2050' as part of their objectives which is underpinned by a plan to reach a nature-positive economy by 2030.
02. **Lead by example and publish own transition plans to a low-carbon, nature-positive economy:** Central banks and financial supervisors must lead by example and provide necessary clarity and forward guidance to financial markets actors by publishing their own clear and detailed transition plan (with clear quantifiable climate and biodiversity goals for 2025, 2030, and 2050 covering all central banking, financial regulation, and supervision activities).

# STRENGTHEN FINANCIAL SUPERVISION OF E&S RISKS AND PRIORITIZE THE MOST IMPACTFUL MEASURES

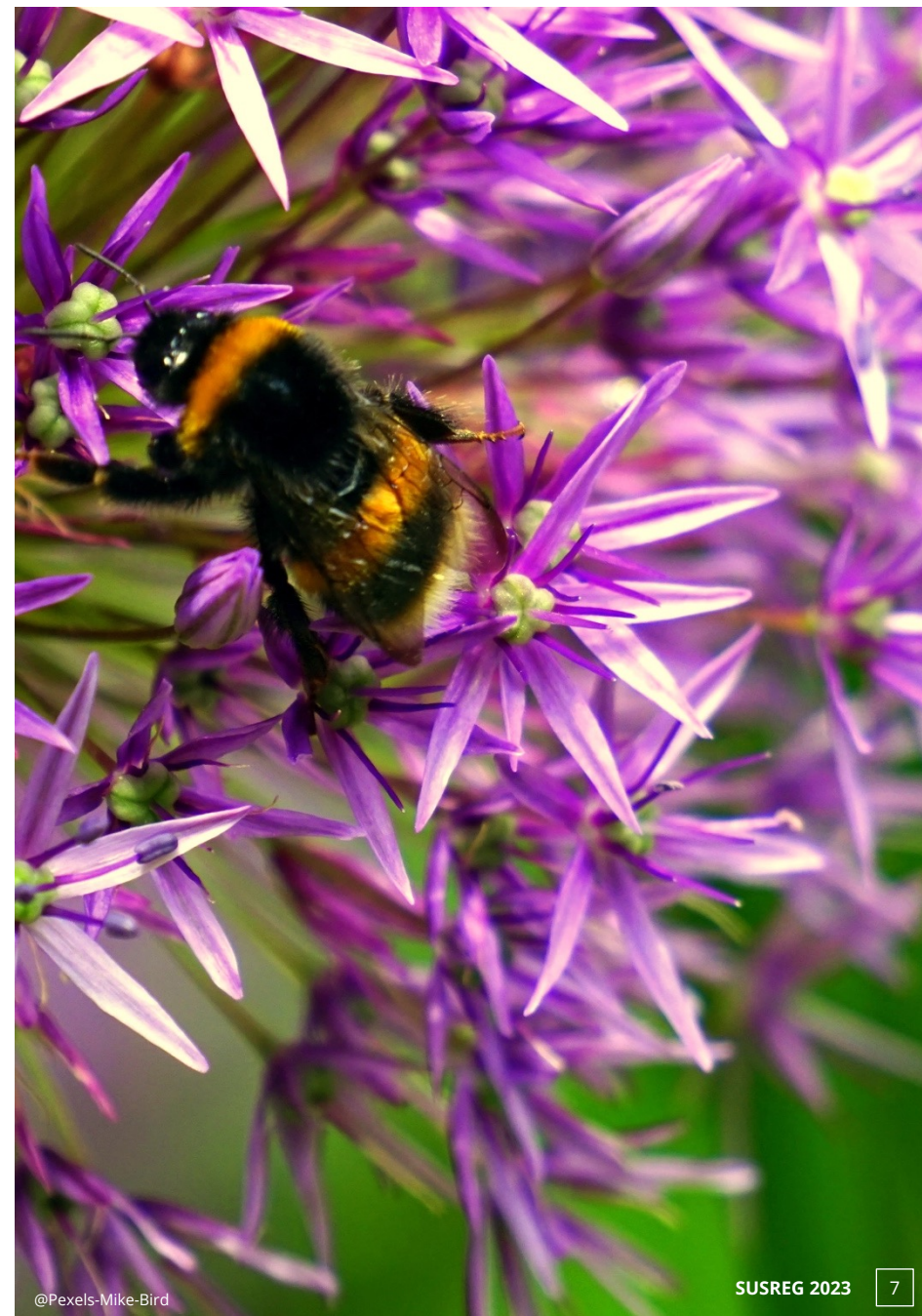
01. **Adopt precautionary approach in setting micro and macro prudential regulation:** Financial regulators often approach climate change and nature loss primarily from the perspective of financial risks, which can lead to waiting for the perfect models and data become available to quantify these risks. However, Principle 15 of the 1992 Rio Declaration states that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation". A precautionary financial policy mindset recognizes the importance of measuring the risks, but instead of waiting for precise measurements, financial supervisors should prioritize preventative action to address the uncertain and potentially catastrophic environmental threats. This can be achieved by establishing a strong micro and macro-prudential supervision such as through; (a) integrating this precautionary approach into pillar one of banks and insurers by asking for more capital for harmful activities; (b) managing concentration risk at micro and macro level; (c) using all regulatory tools to mitigate credit, market and operation risks stemming from climate and nature risks; (d) reviewing the implementation of these supervisory requirement with corrective actions taken in cases of non-compliance.
02. **Mandate credible climate and nature target setting with appropriate review and monitoring:** mandate financial institutions to (a) set and publicly disclose short-, intermediate- and long- term targets to support meeting the goals of the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework; (b) use widely accepted science-based scenarios to set targets; and (c) regularly review targets to ensure consistency with current climate and environmental science, including the Science Based Target Initiative (SBTI) on climate targets and Science Based Targets Network on nature targets (SBTN).



**03. Make climate and nature transition plans mandatory for financial institutions and support the disclosure of transition plan for corporations:** Central banks, financial regulators and supervisors should (a) require financial institutions to develop and disclose science-based targets and credible climate and nature transition plans on a mandatory basis; (b) require financial institutions to engage clients and portfolio companies to set clear expectations to disclose credible transition plans and act on escalation processes in the event of no or insufficient action; and (c) mandate the public disclosure of transition plans that can be used by central banks and financial supervisors to assess the transition risk profile of financial institutions and companies.

**04. Address greenwashing risk by financial institutions:** Financial regulators must confront the growing greenwashing risk within the financial sector. This involves addressing the risk of financial institutions to inaccurately self-certify their financial products as sustainable. To mitigate this risk, standardization is crucial, particularly in defining what should be disclosed regarding the sustainability characteristics (i.e. environmental and social impact measurements) of the financial products. On a bigger picture, there should also be a requirement for financial institutions to transparently disclose the percentage of their portfolio that are classified, not just under the sustainable, but also the unsustainable, taxonomies, enabling the public to gauge how much financial capital the financial institutions are directing towards green and harmful activities.

**05. Set supervisory expectations to assess and integrate nature related financial risks and opportunities:** Given the importance of nature in helping slow global warming and the minimal attention that has been given to nature compared to climate related risks, financial supervisors should start setting expectations for financial institutions to (a) identify and map impact and dependencies on nature; (b) assess risk including having a robust client due diligence; (c) set metrics to monitor nature related risks; (d) develop strategies to finance sustainable practices including nature-based solutions; (e) provide transparent reporting on nature-related risks and mitigation efforts based on internationally recognised frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD); (f) Develop internal governance systems that consider nature; and (g) tap into nature opportunities through product offerings. Financial supervisors should also consider issuing sector or thematic specific guidance for high-risk sectors as well as supporting the development of nature scenarios.





06.

**Improve the robustness of climate scenario analysis and stress testing modelling to accurately portray the actual impact of climate risks and translate these into capital requirement as well as other supervisory requirements:**

Numerous climate-scenario models used in the financial services sector are found to be substantially underestimating climate risk<sup>[1]</sup>. This has the potential to lead financial institutions and policymakers into a false sense of security, assuming that these models offer a comprehensive assessment of risk, without realizing that many of the most severe climate impacts have not been factored in. Consequently, it is imperative to enhance the development of climate risk models and scenarios to more accurately encompass risk drivers, uncertainties, and the full spectrum of climate risk impacts. Financial supervisors should subsequently translate the outcomes of these assessments into the framework of capital ratio, along with other supervisory requirements. This would enable financial institutions to have a more resilient capital and liquidity buffer over relevant time horizons that would shape their business model, exposure profile, business strategy and risk management.

07.

**Design specific insurance supervision policies for insurance underwriting and investment activities:**

In order to enhance their regulatory effectiveness, supervisors must take a more tailored approach when developing rules and guidance specific to the insurance industry. Currently, the existing guidelines appear to be rather generic and high-level, as many of those guidance are designed to be applicable for both banks and insurers. However, given the distinct nature of the insurance business, it is imperative that supervisors address the sector's unique requirements. To address this, supervisory expectations should be enforced for both sides of insurers' balance sheets. This can be achieved by setting expectations for insurance companies to: a) incorporate E&S considerations into their Own Risk Solvency Assessment (ORSA); b) actively engage and support insurance clients and investee companies in adhering to high E&S standards; c) factor E&S risks into insurance pricing and ensure insurance premium reflects the risk of monetary loss related to E&S risk; d) develop products that cater the needs for insuring business and increase resilience against climate and natural risks; e) Immediately exclude any insurance services for severely damaging economic activities; and f) phase out fossil fuel-related investments, aligning with the International Energy Agency's Net Zero Emissions by 2050 Scenario.

[1] The Emperor's New Climate Scenarios: Limitations and assumptions of commonly used climate-change scenarios in financial services



# INTEGRATE E&S CONSIDERATIONS INTO MONETARY POLICIES & CENTRAL BANKING ACTIVITIES

- 01. Integrate environmental and social consideration into all monetary policy tools:** Central banks need to make full use of their monetary policy toolkit, both to reflect the risks derived from environmental and social issues as well as to ensure that their actions promote the transition to a low-carbon and nature positive economy. This includes the integration of environmental and social considerations into central banks' corporate asset purchase programs, collateral framework, foreign exchange reserve management, green subsidized targeted lending, and adjustment of reserve requirement.
- 02. Step up the phase-out of the most harmful sectors from central banks' portfolios and regularly assess the impact of portfolio on climate and nature:** As forceful stewards co-responsible for addressing biodiversity and climate crises, central banks should pledge to align their monetary and non-monetary portfolios with a climate warming trajectory of 1.5 degree Celsius. This can start with disclosure of their portfolio climate impact on a double materiality basis and subsequently having fossil fuel exclusions policy with an "as urgently as possible" target exit year. In addition, central banks should aim to ensure their portfolio is "deforestation and conversion free" (DCF) and minimize negative impacts to biodiversity and nature as much as possible, this can be done through screening the portfolio with robust DCF criteria and disclose the biodiversity impact of their portfolio.






# GOVERNMENT AND OTHER RELEVANT STAKEHOLDERS SHOULD CREATE A CONDUCTIVE ENVIRONMENT FOR THE TRANSITION TO HAPPEN

- |  |   |   |
|--|---|---|
| <p><b>01. Implement and mandate disclosure of sustainable and unsustainable taxonomies</b> which allows the classification of economic activities as sustainable/unsustainable based on science- based criteria &amp; threshold of the impacts on climate, biodiversity, marine and freshwater ecosystems, pollution, and circular economy. The focus of many taxonomies is primarily on classifying what is considered "green," often neglecting the categorization of "red" or unsustainable practices. This creates ample room for green marketing, even as unsustainable economic activities continue unabated. Therefore, the inclusion of an unsustainable taxonomy and corresponding disclosure requirements is equally crucial. Such an approach enables comprehensive assessments of the extent to which financial flows are still contributing to the degradation of our planet.</p> | <p><b>03. Set specific targets and incentives to increase support towards green sectors and divert capital away from harmful sectors without clear transition plans.</b> Incentives for financing green sector include tax incentives that reduce the cost of capital for green projects, low-interest financing or guarantees for green investment, and grants and subsidies for research and development in green industries (particularly for emerging technologies with high upfront costs). Disincentives for financing harmful sectors include carbon taxes, stricter regulations and compliance requirements, and adopting polluter pays principle. Moreover, setting clear targets and maintaining consistent regulations over the long term allows companies to invest in the transition with confidence, as they can expect regulations will remain stable in the future.</p> | <p><b>05. Establish open-source climate, nature, and social data repositories by bringing together relevant stakeholders</b> including ministries, government agencies, and other relevant parties. This unified effort aims to provide all stakeholders with access to crucial data essential for their transitions. The repository would encompass data concerning (but not limited to): a) drivers of physical and transition risks: including projected future hazards, extreme weather events (such as floods, droughts, temperature), anticipated carbon prices, etc.; b) ecosystem services/dependencies, risk and opportunities and state-of-nature; and c) corporate and commitments encompassing company targets, asset and supply chain information, historical and projected emissions, projected production levels, business operation locations, etc.</p> |
| <p><b>02. Scale up and gradually increase carbon pricing in the country.</b> Carbon pricing is a vital component of climate mitigation strategies which allows a price tag on emissions from consumption and production. Despite the increasing adoption of carbon pricing by numerous countries, the current prices often fall short of representing the full externalities costs of carbon. To make the climate goals attainable, the World Bank recommends the prices to reach USD 61 to USD 122 by 2030 per ton of CO<sub>2</sub><sup>[1]</sup>. Thus, we strongly encourage more countries to adopt carbon pricing mechanisms through carbon taxes or emissions trading schemes, and gradually raise carbon prices through a phased approach.</p>   | <p><b>04. Put in place Public-Private Partnerships mechanism to narrow the protection gap and ensure continued provision of insurance covering E&amp;S risks.</b> This measure is crucial to increase insurance accessibility particularly for vulnerable populations who may face rising premiums and reduced coverage due to climate change and biodiversity collapse.</p>  | <p><b>06. Strengthen government's policy and initiatives on "just transition"</b> that considers the impacts of the transition to a net zero and nature positive economy, and provide the necessary support, to the most vulnerable and affected part of groups i.e labour, social groups and local communities affected directly / indirectly by the transition. This can be achieved through various means, such as facilitating social dialogues among all affected parties, bridging skill gaps to minimize employment disruptions during the shift from non-green to green jobs, integrating just transition policies into climate policy, and establishing a just transition fund, among other approaches.</p>  |

[1] State and Trends of Carbon Pricing 2023, The World Bank



A misty landscape with mountains and a forest. The mountains are in the background, partially obscured by a thick layer of mist or low clouds. The foreground shows a dense forest of trees, some of which are silhouetted against the lighter background. The overall tone is soft and atmospheric, with a mix of greens, blues, and greys.

OUR MISSION IS TO STOP THE  
DEGREDDATION OF THE PLANET'S  
NATURAL ENVIRONMENT AND TO BUILD  
A FUTURE IN WHICH HUMANS LIVE IN  
HARMONY WITH NATURE

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